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Original Articles.

POST PARTUM INTRA-UTERINE INJECTIONS OF CARBOLIC ACID.—AN INQUIRY INTO THEIR PROPRIETY.

A Paper read before the Indiana State Medical Society, June 11, 1884, by H. v. Sweringen, A.M., M.D., Fort Wayne, Ind.

On the 12th of March last, Mrs. E., the estimable wife of a prominent lawyer in the city of Fort Wayne, was delivered of her third child. The physician in attendance experienced considerable difficulty in removing the placenta. This difficulty was attributed to a traumatism, sustained a few months prior, caused by a railroad accident, wherein a locomotive on the New York, Chicago & St. Louis Railway collided with a passing train on the Grand Rapids & Indiana Railway, striking the coach in which Mrs. E. was sitting. An abortion seemed, for a time, inevitable, but was, fortunately or unfortunately, prevented.

The probable result of this accident was the setting up of an inflammatory action between a portion of the placenta and uterine wall, gluing them together, or, in other words, the production of adhesive inflammation so-called, by which the placenta became partially though firmly united to the uterus. In several suits already instituted for damages against the several railroad companies above mentioned, the foregoing theory will undoubtedly figure largely in the prosecution.

Her physician, on account of illness, was unable to visit her the day following her delivery, when the writer hereof was requested to do so, for the purpose merely of relieving her bladder. In performing this duty the temperature of the vagina was discovered to be somewhat elevated and the pulse to be rather more accelerated than it should be at this post partum hour, more than twenty-four hours having elapsed since the birth of the child. Having performed the duty assigned me, I left the patient without expressing any opinion relative to her condition, supposing she would soon reach a more normal one, and that her physician would probably be able to see her in due time to give her the necessary attention.

After the lapse of seven days, at about 1:30 o'clock on the following Thursday morning, the 20th, I was called a second time to see her, on account of a violent chill with which she had been attacked soon after midnight. Arriving before the rigor had entirely disappeared, I immediately ascertained her temperature which reached the frightful figure of

106°, but which, in a very short time, during a copious perspiration, declined to about 100°. Her discharge, on the napkins removed, was suppurative and very offensive. Recognizing at once that I had a case of puerperal pyemia to deal with, I soon made known my gravest apprehensions to the husband and nurse, and treated her accordingly.

During the interim of my visits she had been seen three or four times by her physician, who now had a relapse of *his* illness, and was, therefore, again unable to see her.

Resort was now had to an intra-uterine injection of hot water, carbolized moderately, and to the internal administration of quinine, ten grain doses, at intervals of four hours.

During the succeeding twenty-four hours or more, with the exception of a slight sallowness of her complexion and a little too rapid pulse, the patient's condition seemed greatly improved. Indeed, I "laid the flattering unction to my soul," that her danger had passed. But alas! my joy soon merged into the utmost despondency upon witnessing another chill, rapid rise of temperature to 105°, and its almost equally rapid decline with profuse perspiration.

And so, chill after chill followed each other in irregular succession, each attended with a rapid rise of temperature, followed by copious sweating and a rapid reduction of heat. The pulse, after the third rigor, had attained an acceleration of 140, and evidences of exhaustion were now beginning to show themselves.

The intra-uterine injections, increased in acid strength, were continued several times daily, as was also the internal administration of quinine. Carbolized vaginal injections were, from the very first, employed in this case by the nurse, and the utmost cleanliness of patient and surroundings was scrupulously practiced. Not the least care or expense was spared to render successful the final issue of this case, as the financial resources of the family were most abundant. The nurse informed me that prior to my second visit, a small piece of afterbirth had been expelled; a few very small tufts, shreds of membrane and clots of blood came away with the returning fluid of my first intra-uterine injection.

On Sunday, the 23d, her family physician, Dr. W. H. Myers, one of the most prominent practitioners in the State, a man who stands high in his profession, having now been barely able to see her several times with me, seconded my suggestion to call a third physician, whereupon Dr. B. S. Woodworth, who is also one of the oldest and most prominent physicians in the State, was now requested to join us in consultation. The result of this consultation demonstrated only that between *physicians* there is rarely any difference of opinion: that the common observation "doctors will differ" is applicable only to quacks.

Notwithstanding all that was done to save her most valuable life, with-

out any manifestation of any secondary lesions, death ensued on Wednesday morning, the 26th, just six days after my second visit.

During my attendance upon the foregoing case, I was called to visit another, Mrs. B., residing on South Broadway. I discovered that she had just sustained an abortion, at probably three months of utero-gestation, which was followed by a most profuse hemorrhage. Six years prior, she very nearly died from the same cause. In the present instance, the fœtus and its appendages were all seemingly removed entire, but somewhat decomposed and offensive, life having been undoubtedly extinct for several days. She did not know that she was pregnant, having menstruated regularly, and, at times interperiodically, as was her wont, occasionally. Remembering my former experience with this case, I enjoined perfect quiet, prescribed ergot, as the uterus was now quite flaccid, relaxed, illy disposed to contract, and was at this very moment discharging from its cavity, without pain or contractions, too much of the vital fluid, although the more active hemorrhage had subsided before my arrival. In order to satisfy myself that no remnant of the secundines was retained, and to check the now too profuse flow of blood, I administered an intra-uterine injection of hot water mildly carbolized. The returning fluid contained no appreciable detritus. Upon the former occasion referred to, and at sundry times subsequently, she had taken so much ergot that she finally became sickened at the very sight of the bottle containing it. Having had some of it on hand, knowing for what purpose I had prescribed it, her husband gave her a dose before my arrival, and her stomach promptly rejected it; the dose was immediately repeated, with the same result; after I had given her the injection, I also gave her a dose of ergot which she retained for a few minutes only, when I decided to discontinue it entirely and rely on the oxytocic effects of quinine alone. As the husband alone was to be her nurse, I communicated to him my instructions. The case progressed favorably apparently, for a period of four days, at the expiration of which time, during sound sleep, about midnight, her womb all at once largely relaxed and a most frightful gush of blood took place, waking and alarming her suddenly. As soon as her bedside was reached I lowered her head, elevated her hips, turned out the clots and tamponed. Nothing but pure blood had been expelled, leaving my patient almost completely drained. In about twenty-four hours I removed the tampon, washed out the vagina only, and inserted another tampon, a silk handkerchief. Having been called to a neighboring town when the time arrived for the removal of the second tampon, I addressed a note to the husband, in which I directed him to remove it and use the syringe as I did on the previous day, all of which he did. Visiting her on my return, I discovered that she was now having quite a copious, offensive discharge. I decided not to administer another intra-uterine injection, but directed the husband to use carbolized

vaginal washes two or three times daily, while the offensive discharge continued, and give per os, iron and quinine, a generous diet, etc.

The case seemed to be progressing favorably for three or four days, when I noticed that her pulse became accelerated, several indistinct rigors appeared, and her temperature reached upon one occasion 105°. She complained now for the first time to me at least, of her back feeling very sore and disagreeable, when her husband observed that "it amounted to nothing," and I did not examine it. I now feared some form of blood-poisoning was developing, but could detect no prominent symptom or group of symptoms that would establish the diagnosis either of pyemia or septicemia; every afternoon her temperature would rise, her pulse quicken, to decline slightly, after midnight. This was the history of her case for several days when I examined her back and to my great surprise detected, immediately over the sacrum, that the skin and subjacent cellular tissue, within a circumference as large as an ordinary saucer, was entirely *dead*, and that no power under heaven could now prevent a most extensive sloughing. The latter occurred and proved to be very deep and large, laying bare the sacrum and presenting a most unsightly spectacle; it is now, however, filling up rapidly by granulations, and the patient is convalescing. What I feared as the development of some form of blood-poisoning, was, clearly, then, a simple inflammatory, irritative, surgical or traumatic fever. What was the cause of this extensive ulcer? It certainly was not a bed-sore, for she was not bed-ridden. I attribute it to the carbolic acid in the vaginal washes employed, which trickled over and became arrested upon the surface affected, which was not properly attended to after each injection, her tissues being drained of their usual supply of blood, not being able to resist the escharotic effect of the acid, even in a greatly diluted or reduced strength. It is needless to say that the husband, as a nurse, I discharged and insisted on a female being substituted. The ulcer was treated very simply, with warm water only.

On the 27th, not forty-eight hours after the death of the former case, I was summoned to attend another confinement, a primipara of about twenty-one years of age. I informed the messenger, the husband, of my recent discouraging experience and of the risk I would entail in attending to his wife, having already been obliged to cancel several obstetric engagements because of it. I told him also, that there seemed to be an epidemic tendency to the disease, inasmuch as, acting as County Health Officer, I had received several reports of death from it from different parts of the County. He seemed disposed to incur the risk and insisted on my conducting her accouchement. After taking the necessary precautions against communicating any infection, I proceeded to his residence, 121 East Washington street, where I found his wife, Mrs. M., in the first stage of labor. Upon examination I informed her that every-

thing was all right, but that it would be some hours before she would need my services, it being now about 3 o'clock p.m. I returned again immediately after supper, and observed that she had made considerable progress during my absence, and that it would require but a few hours more to accomplish her delivery. Her labor progressed naturally enough, or only *un*naturally in this that not even an audible groan or sigh escaped her lips; indeed, it was the most quiet labor I ever witnessed and was terminated by 9 o'clock. The placenta was easily and promptly removed entire. I left her feeling comfortable, indulging myself the assurance that a speedy, favorable issue would be the result of this case.

On visiting her the following day, nothing unusual was observed, save that her pulse, which, before and after delivery, was quite frequent, had not yet decreased in rapidity, and that I was obliged to relieve her bladder with a catheter, *not* the one used in the former or first case.

On visiting her the following day, the 29th, patient expressed herself as feeling comfortable with the exception of a distended bladder, which the use of the catheter again relieved; pulse 100. The next day, the 30th, pulse 110, temperature 103°, lochia offensive and profuse, no milk secreted; obliged to nurse the child artificially. No pain or complaint of any kind; now able to pass her urine. Ordered carbolized injections, *vaginal only*, and prescribed quinine. The next day, the 31st, pulse 120, temperature 103°, lochia not quite so profuse or offensive; no milk; no evidences of metritis, peritonitis, tympanites, cellulitis or phlebitis, nor was there any complaint of anything except general weakness. April 1st, pulse 130, temperature 103°, lochia more suppurative in character; no milk. She continued in about this condition, her pulse and temperature ranging somewhat lower, until April 6th, when she was taken with a violent, prolonged chill, her first, during which her temperature reached 105° and her pulse beat 155 times per minute; the chill was followed by copious sweating and a marked reduction in both temperature and pulse; no milk; each napkin removed contained a discharge that was evidently pus. I now prescribed internally two grains of iodoform every four hours, increased the doses of quinine and instructed the nurse to feed her liberally and regularly and also to give her sherry wine freely. On the following day, the 7th, she had another less violent and prolonged chill; pulse 140, temperature 104°; discharge the same; no milk. I now expected every day to be her last, until Friday the 11th, when her temperature and pulse fell to 100 respectively, and the discharge on her napkin was discovered to be streaked liberally with pure, fresh, bright red blood, and was much less offensive. From this date she commenced to improve and I ceased visiting her in a few days thereafter.

On the following Friday, the 18th, her husband called at my office for a tonic or "something to strengthen her" at which time he informed me that her milk was coming in quite freely.

I have now given you a faithful history of the foregoing cases, which have so recently come under my observation, for the purpose of introducing for your consideration, the subject of post partum intra-uterine injections of carbolic acid, which are now so commonly practiced, being advocated by our standard authorities.

In the Academy of Medicine of the city of New York, recently occurred an interesting discussion on the "Prevention and Treatment of Puerperal Fever," in which the distinguished gentlemen Drs. T. G. Thomas and Fordyce Barker were the principal disputants.

When the propriety of an orthodox practice much observed and seemingly popular, becomes, by a leader like Prof. Barker, doubted, it is wonderful with what facility the infection of skepticism spreads throughout the ranks of the profession, and with what suddenness sprigs of incredulity shoot up in every direction. The reason is obvious. We are gregarious animals intellectually as well as physically. We have a natural inclination to follow the crowd; to obey the dictates of fashion; to keep in the procession until some one breaks ranks when, if he be a prominent person, we are all liable to scatter.

Upon the question now under consideration the time is ripe for our ranks to break. Indeed, it has for a long time been a question in my own mind whether or not post partum intra-uterine injections of carbolic acid were proper or safe, and I was simply waiting for some master to say they were not. While Prof. Barker has not said so in so many words, he has, in the following language, quoted from said discussion, left sufficient room for doubt. He says: "Antiseptic injections, both vaginal and intra-uterine, are of great service when the indications for their use are clearly shown by local signs or general symptoms; but they cannot be recommended with safety as a routine practice on theoretical grounds, as, for obvious reasons, they may be most detrimental in retarding the cicatrization of lesions and the other processes of normal convalescence, and otherwise sometimes dangerous. In several cases which I have seen with others, where antiseptic injections, both vaginal and intra-uterine, had been used with all the care and precautions inculcated by the author (Thomas), and kept up for several days, the temperature rapidly fell, the profuse and sometimes offensive vaginal discharges speedily diminished, the pulse and general condition manifestly improved after the injections were discontinued."

When debates of this character occur, it is very natural for the physician who reads them, to sustain one or the other of the participants, if either corroborates his own experience. I therefore feel inclined to sustain in my feeble manner Prof. Barker's views on this subject, because they accord with my own. The physician who profits not by his own experience is unfit to practice his profession, no matter how valuable the experience of his fellow practitioners may be.

My own individual method of reasoning out my objection to this universal procedure is as follows:

Carbolic acid is a protoplasmic poison; destructive to all forms of life, whether vegetable or animal. The external application of carbolic acid *has* destroyed life. Have you never felt its benumbing, distressing, paralyzing, unpleasant, mummifying, anæsthetic effects upon the tips of your fingers while handling even a very mild solution of it? When applied to the skin, it acts as a caustic, turning the cuticle white. It causes very great local anæsthesia, extending inward for some depth, to the tissues with which the acid has *not* come in contact.

During the past winter, a prominent lady of Fort Wayne, the wife of our worthy Congressman, had a felon or a supposed felon on one of her fingers; a neighbor lady prescribed for her; producing some carbolic acid, the latter requested her patient to place her finger in it; it was done, the pain left her finger as by magic, and, in due course of time, the finger itself left the hand, or so much of it as had been dipped into the acid, entirely withered and sloughed away.

Can it be possible, then, in view of the well known effects of carbolic acid, that its intra-uterine application is proper or safe under any circumstances connected with post partum cases? Will not its escharotic effect interfere with the proper drainage of a suppurative uterine sinus by coagulating the albuminates in its open mouth and thus seal or render pent up whatever pus may be contained therein? Does it not retard instead of invite the appearance of healthy granulations on a sloughing surface? Does it not prevent the exudation of lymph and the formation of new membrane in the post partum uterus? Does it not by its paralyzing, anæsthetic, escharotic effect interfere with the nerve force employed in the process of involution?

Inflammation, it is true, is an evil which the physician seeks to prevent; but, when once established, it is often a necessary evil, having laws peculiar to itself, and, therefore, its natural course cannot always be interrupted with impunity; particularly, I think, under the circumstances now under consideration. If some offending substance be present in the stomach, vomiting is produced, the substance is evacuated, and this organ, having thus relieved itself by an effort of nature, now goes on with the performance of its necessary, usual functions. If an attempt be made to allay the vomiting before the offending substance is thrown off, it is an unwarrantable interference with a salutary effort. Sometimes the effort is ineffectual, and needs the assistance of the physician.

Now, it is my opinion that in all cases of inflammation resulting in suppuration, nature erects a barrier for the protection of the general system against the absorption of pus. In the case of an ordinary abscess, as you know, the pus is enveloped by a sac called the pyogenic membrane from which it is supposed the pus is derived or by which, we are

taught, the pus is secreted. Whether this be true or not, I look upon this membrane as a wall of defense for the general system, protecting it against pyæmic absorption. If this be true of an abscess, I take it for granted that it is equally true of the suppurating internal surface of the womb; that nature understands her business here as elsewhere, and protects the system from infection by the formation of some such membrane or wall of defense. Now, I believe that in the cases under consideration, intra-uterine injections of carbolic acid, while they destroy the offensive odor and render for a time the suppurating surface cleanly, destroy, also, by their escharotic effect, this membrane or barrier or wall of defense.

Let two persons of equal general health, sustain like injuries, resulting in more or less extensive sloughing. Now, dress the suppurating surface of one patient with simple, pure, warm or hot water, and that of the other patient with carbolized water, and notice in which case healthy granulations will first appear.

Cleanliness is the all-important object to be attained in the treatment of a sloughing surface, and this can be secured without the use of so potent an agent as carbolic acid. Even if cleanliness is not absolutely secured, if there be proper drainage and no absorbing surfaces, recovery will certainly take place. Most if not all escharotics are antiseptics and disinfectants, but it by no means follows that all antiseptics and disinfectants are escharotics or even irritants. Frequent cleansings with warm water alone is a procedure often sufficiently antiseptic, antizymotic and disinfectant; if not sufficiently disinfectant, there are plenty of harmless agents that may be employed, such as permanganate of potassium, bromochloralum, sol. chloride of soda, etc. It is said that the good surgeon is not afraid of a little blood. I would coin a like phrase by saying that the good obstetrician is not afraid of a little stink.

An offensive lochia *per se*, is by no means an indication of a fatal termination. If it be true, as Robin asserts, that putrefaction destroys animal poisons, an offensive lochia may be regarded as benign or harmless. In a number of my cases the odor present was most intolerable for days together and yet recovery took place, while I have records of several cases of puerperal fever in which the lochia was *not* particularly offensive, but which cases proved fatal. We speak of "healthy pus" or "laudable pus", may we we not also speak of "laudable putridity" or "healthy putridity" or "healthy putrefaction", particulary in these cases.

J. Matthews Duncan reports the following:

"A. E. was delivered naturally of her second child on June 8. Flooding occurred after the birth of the child, and slight loss of blood continued for seven days. Then the lochia became fetid. On the eighth day she had rigors which recurred daily. She was brought into the hospital on the tenth day and was delirious that night. On the eleventh day she complained of no pain, was pale, sick, frequently vomiting, with diarrhœa,

uterus tender, breath sweet, respiration 44, pulse 146, temperature 104°, copious flow of stinking lochia. A piece of placenta was removed from the vagina. Under the influence of chloroform the hand was introduced into the uterus, and adherent placental masses removed. The whole genital tract was then washed out with a solution of carbolic acid. That night the delirium ceased, the pulse was 100, the temperature 101°. After this the recovery was uninterrupted."

It cannot be doubted I think, that an equally favorable issue would have been the result of this case, had the genital tract *not* been washed out with a solution of carbolic acid, but simply kept clean by irrigation with warm water.

Billroth performs all of his operations without the use of the carbolic acid spray, and his success is second to that of no surgeon in his own or any other country. There seems to be a tendency among surgeons to forsake silently, without expressing their reasons for so doing, the employment of carbolic acid as an ever-to-be-used antiseptic, etc., and to take up corrosive sublimate in its stead. Why this silent rejection. Is it not because they feel a delicacy in speaking ill of so popular and universally employed an agent?

But I have already transcended the limits allotted me, and must therefore close these scattered remarks. I cannot do so, however, without announcing my belief in the triality of puerperal fever. I mean by this remark that the lying-in woman is subject to three distinct diseases under the common name of puerperal fever, viz.: puerperal fever, puerperal septicemia, and puerperal pyemia. I have seen typical cases of each of these diseases. I have seen the old fashioned

PUERPERAL FEVER,

or "childbed fever" of Meigs and Barker, in which the patient lay with knees drawn up to relax the abdominal muscles, suffering great pain from metritis, peritonitis and tympanites, and in some cases from phlebitis and cellulitis. In the last case I had of this kind stercoraceous vomiting was present, and the genital tract was so edematous that, in order to relieve her bladder, I was obliged to expose her person to find the meatus. She had been attended by a midwife. On one occasion, about midnight, believing her to be dying the family and friends were summoned to take final leave of her. She recovered, and is living now, as then, at 264 West Wayne street, Fort Wayne, Indiana. No carbolized injections were used in her case.

PUERPERAL SEPTICEMIA

is often speedily fatal. The poison being more intense, it spends itself upon the nervous system in a very short time after its absorption. It is rarely developed by a chill; if it is, the rigor is seldom or never repeated. The skin assumes a pale or muddy appearance. Owing to the greater intensity of the poison, the nerve centres becoming profoundly impressed, in-

flammation of the different organs as a secondary consequence is not as a rule apt to occur. Parotitis is occasionally seen in these cases. The disease is as apt to set in on the next day after delivery as after four or five days. The temperature is not very fluctuating, but it maintains a high degree, 104°, 105° or 106° with little variation, and copious perspiration does not often occur. The pulse is weak and frequent, and does not in all cases correspond to the temperature. Pain is seldom or never complained of. Very obstinate vomiting is sometimes present. Low muttering delirium is common, and in a case that just occurs to me, the closing hours were marked by the wildest maniacal excitement.

PUERPERAL PYEMIA

cannot of course be developed until after suppuration has taken place. It is then ushered in by a chill and a very rapid rise in the temperature, reaching as high as 105°, 106° and 107°. A very profuse sweating then occurs, when the temerature declines to or very near the normal standard. Chills will then follow at irregular intervals throughout the attack, each being attended with a rapid rise and fall of temperature, the latter being partly caused no doubt by the profuse perspiration. Diarrhœa is not uncommon, and the breath has sometimes the odor of sweet clover. The skin is often sallow, in some cases decidedly jaundiced. Pleurisy, pneumonia, hepatitis, and metastatic abscesses are common secondary complications, though they may remain latent, no subjective or objective symptoms existing that would lead the physician to suspect their presence. If the case lingers any length of time, pyarthroses are liable to occur, which may be confounded with rheumatism.

Puerperal pyemia and puerperal septicemia may exist conjointly; and metroperitonitis or the old childbed fever may be added in the same case and yet prove nothing against their separate and distinct entities. The blood may be poisoned by three distinct poisons at the same time, for instance by strichnia, arsenic and belladonna, the symptoms of each masking to some extent those of the others.

Dr. Murchison has clearly shown the co-existence of scarlatina and variola, of variola and rubeola, of variola and erysipelas, of whooping-cough and bronchitis, etc. We constantly see opium and digitalis, jalap and mercury, and many other combinations of medicines, each producing its proper effect, more or less modified by the others, in the same system at the same time. There is no fact better established in medicine than that a combination of Epsom salts and senna produces a more efficient and pleasant action than either separately. The occasional co-existence of these several diseases is calculated to confuse, I admit, but the fact that they occur separately constitutes them peculiar entities.

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Society Reports.

TRANSACTIONS OF THE OBSTETRICAL SOCIETY OF CINCINNATI.

Stated Meeting, April 10, 1884.

The President, C. O. WRIGHT, M.D., in the Chair.

Dr. Trush reported as follows:

PREMATURE LABOR FOR CONTRACTED PELVIS.

In the October number, 1881, of the OBSTETRIC GAZETTE I reported the case of Mrs. G., in whom, by reason of contracted pelvis, the artificial induction of premature labor had been practiced.

In the report referred to it is stated that the patient in question had previously passed through three confinements with labor at the normal end of gestation; the first two being tedious and difficult forceps deliveries; in the third craniotomy being found requisite; that to avoid a similar occurrence at the fourth pregnancy labor was induced at about the thirty-sixth week of utero-gestation and the patient delivered of a well developed male child, without assistance. Very naturally this lady was more than ordinarily observant of the regular recurrence of her monthly sickness and great was her trepidation when the month of July, 1883, passed without the accustomed flow; she had kept strict account and knew she had been "unwell" on the 22d of the previous month, June. I consoled her, being appealed to for advice, by calling to her mind the easy labor she had passed through in her last confinement and remarking that the same thing could be done again, if her fears, that she was pregnant, should prove true; this, in due time came to be recognized as an undoubted fact and it was then agreed that about the thirty-sixth week labor should be brought on again as in her last pregnancy, in the hope of a like, happy termination. According to patient's data, the 29th of February, 1884, would mark the completion of the thirty-sixth week of her gestation and this day was fixed upon to incite the labor. As in the previous instance the hot vaginal douche was administered for three days—the three days preceding the twenty-ninth—but again it failed to excite labor pains, though given strictly in accordance with Spiegelberg's precept; nor was the softening effect so marked as before, still it was sufficiently obvious.

Again therefore it became necessary to employ other means and the flexible bougie was selected as on the former occasion; it was inserted on the evening of the 28th of February and allowed to remain for twenty-four hours. This time however I had the misfortune to puncture the membranes—at least aminotic fluid began to trickle away shortly after the insertion; this guttatim flow continuing all night and next day. Actual

labor-pains did not set in until towards noon on the 29th; they were quite regular during the afternoon and became severe after 8 o'clock; by 10 o'clock the sufferings of the patient were such that chloroform inhalations were urgently demanded and administered. Despite the manifest vigor of the pains the process of dilatation was exceedingly slow; the bag of waters being absent and the fœtal head resting upon the brim no distending force was acting upon the cervix, its walls consequently were hanging loosely down into the vagina and to reach the presenting part from this point, a short channel instead of a mere orifice had to be traversed. By 2 o'clock A. M. of the 1st of March a sufficient degree of dilatation had been reached to admit of the application of the forceps, which, seeing that the head remained stationary at the inlet, it had been decided to use as soon as admissible. Even now the anterior segment of the cervix projected considerably beyond the presenting vertex, and, together with an exaggerated obliquity of the pelvis and pendulous abdomen, was well calculated to render a forceps delivery more than ordinarily—for the superior strait—difficult. From previous experience with this patient I knew that without a thorough chloroform narcosis the operation could not be performed and not deeming it judicious to incur the double responsibility of the anæsthesia and the operation, I called upon my friend and neighbor Dr. Carrick to administer the anesthetic. As the fœtal head stood about transversely in the upper strait the instrument necessarily at first embraced it squarley over forehead and occiput, and only after considerable descent had been made was it found possible to grasp a diagonal, the left,—occiput being to the left—diameter. The extraction lasted probably half an hour and required a good deal of force, but was successful in that a living child, a girl was brought into the world; pronounced pressure marks and some abrasions were visible upon the head, especially upon forehead, but these injuries have since entirely disappeared. And now, six weeks after the labor both mother and child are enjoying the best of health.

In reporting this case I had a twofold object in view, viz: first, I wished to record another instance in illustration of the beneficent effects of this operation, the induction of premature labor, in contracted pelves; a measure which I am led to believe is still too much ignored by obstetric practitioners; and, secondly, to show the contrast in point of ease, or difficulty between two labors in the same person and conducted, as nearly as possible, in the same manner; one, the former, being as easy as any labor well could be, the other—subject of the present report—almost diametrically the opposite. If it is now asked why the second premature labor of this woman was so much more difficult than the first I have these explanations to offer: The child of the second premature labor was considerably larger than that of the first; its head was more nearly round and the transverse diameters therefore proportionately greater, while the

head of the other, the first, was, and remains to this day small in its transverse, but large in its antero-posterior, measurements. And again the soft parts of the mother were not nearly in so favorable a condition in the second as the first, premature labor; owing, doubtless partly to the early rupture of the membranes and partly to inadequate douching.

The augmented size of the child this time over the former is probably satisfactorily accounted for by the fact that the mother was throughout the entire period of her last gestation, in most excellent health, while during the former she was, to use her own expression, "poorly all the time."

DISCUSSION.

Dr. Palmer said he remembered distinctly the case referred to by Dr. Trush, when he was consulted as to the advisability of the induction of premature labor. He then advised the use of the bougie, and it was resorted to, after a failure with the use of the hot douche. The pelvic deformity was in the conjugate diameter of the brim, and the advisibility of bringing on the labor prematurely was clearly manifest. The results obtained at the time proved the correctness of the practice.

The speaker said he much preferred the elastic bougie to any other means. Because of the possibility of the introduction of air into the uterine cavity from the use of the gum catheter, the solid but elastic bougie should be chosen. It is introduced within the cervical canal, and slowly and gently insinuated between the uterine wall and the membranes, up to the region of the fundus, care being taken to avoid, if possible, the placental region and rupturing of the membranes.

In his experience it had never failed to bring on uterine contractions, followed by labor in its usual way, within twenty-four hours, after its first inserton. He believed it to be the most reliable of all methods for the induction of premature labor, and, as a rule, perfectly safe.

The hot douche is safe, but cannot be depended upon. Two experiences with it, in the case reported to-night, show this. Nevertheless, the hot douche is valuable. As the methods employed for the induction of premature labor should be used in such order, and with choice of such means which best imitate the natural process, it follows that it would be well, as Dr. Trush did, always to commence with the hot douche, follow it up for a period of two or three days, and then failing (which will be very probable) to excite contractions, introduce the bougie in the manner described. We thus first soften the cervix, dilate the cervical cavity, increase secretions, all of which are *preparatory* changes, naturally carried out prior to normal labors. Then, by the local irritant (bougie), uterine contractions are promoted—labor proper. So soon as the uterus commences to act well the bougie should be withdrawn.

Dr. Trush, in reply to the question by Dr. Wenning, if he had ever succeeded in inducing labor pains by the hot vaginal douche, stated that he had not, but that his experience was limited to the two premature con-

finements in the patients reported upon this evening; it might act differently in other cases. He had employed the douche on the strong recommendation of Spiegelberg, in his work on Obstetrics, and because it seemed a harmless remedy, and did not preclude the use of other agencies. Although he had not succeeded in either instance in developing labor pains by the vaginal douche, it had rendered such signal service in softening the cervical and other adjacent tissues, that he should always employ it for this, if for no other pnrpose.

Dr. Cleveland remarked that what he had to say did not bear directly upon the subject under discussion. The presence of an irritant as a factor in inducing premature labor suggested to him the astonishing amount of rough usage the pregnant uterus will sometimes bear. A case illustrating this had happened to him some time ago.

A woman forty-five years of age consulted him for a growth in the pelvis. She had not menstruated for a year, and thought that she had reached the menopause, in which view he coincided. He diagnosed the case as one of fibroid tumor, and even went so far as to locate it. A colleague, who had had at that time a more extensive experience in gynecology, also examined the case, and agreed with him in his diagnosis. The enlargement grew rapidly, and in about three or four months after he first saw her, having in mind his previous diagnosis, he again examined her. He introduced the sound, but had not passed it very far when he felt a gentle tap, which ended the examination.

He mentioned this case to show the mal-treatment the pregnant uterus will sometimes stand.

The sequel of this case was interesting. The woman had convulsions. He was called in, but found her dead on his arrival. He performed abdominal section and removed the child, which is living to-day.

Dr. Wenning said that we find the sound mentioned by the older authorities as one of the methods of diagnosing pregnancy. So used, it certainly could not have been followed by any number of premature births.

The President remarked that twenty-four hours had been mentioned as the time usually elapsing between the introduction of the sound and the beginning of labor pains. In his experience thirty six hours was the shortest time in which he had ever been able to bring on labor.

Puerperal Eclampsia.

Dr. Wm. H. Wenning reported the following case:

On March 4, I was called to see Mrs. N.M., æt. 37, a native of Ireland, who was looking forward to the delivery of her first child. Her husband in calling upon me stated that his wife was very much swelled, and also very much frightened, because her neighbors told her that she had dropsy, and would have "a terrible time of it" if she lived at all through her labor. Her fear was still more increased by the fact that her mother,

who had died not very long ago, said on her deathbed to her daughter that the latter would soon follow her.

This history of general dropsy and great mental depression in a primipara so far advanced in age naturally excited my greatest apprehension.

When I visited the patient I found her, though otherwise of good physique, very anæmic and œdematous. Her face was swollen, almost to the closure of her eyes; the cellular tissues of her body, abdomen and chest was infiltrated, and her lower limbs had truly elephantine proportions; only her arms and hands were not swollen, but she stated that they had been so but recently before. On interrogation I learned that she expected soon to be confined, and as the peculiar conformation of the abdomen somewhat arroused my suspicion, I proceeded to make an internal examination per vaginam. I found the os small and nearly closed, but a hard body, apparently the head, could be felt through the uterine wall. On conjoined internal and external palpation I could move this body up and down (one hand on the head, the other on the breech), but at the same time another body seemed to remain stationary alongside of the first. Hence I concluded this to be a case of twin pregnancy. No fœtal heart sounds, however, could be heard. These three facts, the general anasarca, the age of the patient at her first confinement, and the twin pregnancy, at once suggested to me the probability of puerperal eclampsia setting in at the time of labor. On further interrogation I learned that the bowels were loose, and had been wisely kept so by the use of saline cathartics, of the patient's own accord. The urine was said to flow normally, but the patient was suffering occasionally from headache ever since the time the dropsy began to appear, which was in the fourth month of pregnancy. Her eyesight was, however, perfect. I of course immediately required a sample of her urine, which, on examination with heat, nitric and picric acids, proved to be loaded with albumen. My chief aim was to allay her mental excitement, by consoling her that soon everything would be over, and kept her at rest by judicious diet, awaiting her time of labor. In addition I prescribed ten grains of benzoic acid, to be taken every four hours.

On the second day following this visit I was again summoned to the patient, with the intelligence that she now had labor pains. On arriving at her house I learned that she had not rested well all night, and was very much fatigued, but the great discomfort felt in the upper part of the body had somewhat subsided by the descent of the fœtus. I then ordered small doses of opium (¼ grain every half hour), which gave the patient a great deal of rest, only to be disturbed now and then by incipient labor pains.

Things went on very favorably and quietly for the next four hours, and at 3 P.M. the patient told me she felt greatly relieved, and much better than she had felt for a long time. I congratulated myself that so far

the dreaded convulsions had not yet set in, and was beginning to hope that although the symptoms pointed toward such an event this would prove an exception to the rule. As I noticed the patient was anxious to have rest, I told her I would leave, to return in a short time. I had scarcely reached my house when I was again called in great haste, to learn that Mrs. M. just had a spasm. Shortly after my arrival she had another convulsion, but this was promptly checked with the immediate inhalation of chloroform. I continued this treatment as soon as the muscular twitchings of the face showed that a convulsion was imminent, and so cut them short, so that they lasted only a few seconds. Immediately after the attack I administered from five to ten drops of Magendie's solution of morphine. In this manner I tided her along until the os was sufficiently dilated, when I ruptured the membranes and delivered the woman by means of the forceps, of the first child, at 10 P.M. The child was born asphyxiated, but after long and persistent efforts at artificial respiration, breathing was at length excited. I then turned my attention again to the mother, and after several hours delivered her of the second child, which was much larger than the first, but was born dead. The reason for delivering her as soon as possible by artificial means was because the convulsions seemed to become more severe with the increasing pain. She had eight convulsions, six before the birth of the first and two before the expulsion of the second child. She was kept under the influence of chloroform profoundly during the birth of both children. The perineum, as might be expected, was torn nearly to the anus, and though it was sewn early in the morning, no union took place, a fact not surprising to me when its parts were so terribly rigid and swollen.

The patient made a good though slow recovery, and had no more convulsions after the completion of labor. The albumen, after three or four days, was reduced to nearly one half of the quantity as obtained in the first examination, and after another week no trace could be found. The swelling rapidly subsided, and with the administration of tonics the patient greatly improved. A rather offensive discharge from the vagina was met with injections, first of a solution of carbolic acid, and afterwards of the bichloride of mercury, 1 to 2,000. The laceration, which at one time threatened to become gangrenous, was dressed with acetate of lead and boracic acid in powder, upon which healthy granulations appeared. At the present time (April 7th) the patient is again all right, except a slight vesical irritation with which she has been troubled at times since her confinement. For the lacerated perineum I proposed a secondary operation, which I shall undertake, with the patient's consent, as soon as she is strong enough to undergo another operation.

Dr. Trush, in this connection, reported the following case of

ECLAMPSIA GRAVIDARUM.

Mrs. E. N., æt. 40, Irish, came to consult me about the middle of

February last concerning a severe headache, which, it was stated, recurred with great regularity every afternoon and lasted far into the night; in the morning she was usually nearly, or quite, free from pain. Knowing her to be pregnant, and with her first child, and then advanced in her gestation to about the sixth lunar month, I ordered half-drachm doses of bromide of potassium, every three or four hours until the headache should cease, or the quantity prescribed should have been taken. For several days I heard nothing further of the case, and when I did the report was to the effect that the medicine gave relief at first, but after the lapse of two or three days the pain in the head had returned again with increased violence and the medicine now did no good. The periodicity still seemed to be a marked feature; in other respects the bodily functions appeared to be fairly normal; there was no œdema; the flow of urine was reported plentiful and the bowels were free. Under the impression that the marked exacerbations in the pain were the result of malarial intoxication, I now prescribed quinine with morphine, giving five grains of the sulphate of quinine with one-eighth of a grain of sulphate of morphine every three hours, until four doses should have been taken. This prescription was made in the morning; in the afternoon of the same day I was hastily sent for, the messenger stating that Mrs. N. was in spasms. I learned on arrival that shortly after taking the second dose of quinine the first spasm had come on, and that now she had had two spells, the last one very severe. Mrs. N., I found, was profoundly comatose, her breathing stertorous, pupils moderately dilated; a little urine drawn off with the catheter was strongly albuminous (heat and nitric acid test). The uterus was quite hard, as if in a state of contraction, but the cervix was soft and the os closed. It was now plain enough that the headache had been precursory to the eclamptic seizure and the whole train of symptoms doubtless the result of urinæmic, instead of malarial intoxication. While making these investigations the patient had a third and most violent convulsive seizure and, obviously, more were in store unless energetic remedial measures were interposed. Having repeatedly, within the past few years, witnessed the salutary effects of hypodermic injections of morphia and atropia in this malady, I injected as quickly as possible under the skin of the abdomen one-half grain of sulphate of morphia with one-sixtieth grain of sulphate of atropia, and, on the appearance of a fourth, though milder, seizure, some half or three-quarters of an hour later, this dose was repeated. After this the patient had no further convulsions. Being unable to swallow, her bowels were evacuated by large enemata, but as soon as deglutition became possible bitartrate of potash and bromide of potassium were administered in alternation every two hours, viz.: two drachms of the former and one drachm of the latter. Next morning the patient was fairly conscious and free from pain; she had had several copious watery evacuations from the bowels and had also

voided her urine. The cream of tartar was now reduced in quantity to diuretic doses and the bromide given less frequently; after the third day, only twice in the twenty-four hours. Patient thus progressed admirably for an entire week and I began to believe the pregnancy would continue to the normal end, when, apparently, all at once, during the night, she was seized with severe pain in the back and about the hips and after some eighteen hours of suffering gave birth to a dead fetus, its development corresponding with the supposed period of gestation. Patient now made a speedy and pefect recovery.

DISCUSSION.

Dr. Cleveland remarked that it was a little singular that he should have had a case of eclampsia in the past week very similar to the one reported by Dr. Wenning. He was summoned to the case by a midwife and upon his arrival was informed that it was a case of twins, one child having been born and that she had had a "spasm." At this time there was no sign of convulsions and he had to take the midwife's word for it.

He examined the woman and found another child. The membranes were still intact and the pelvis capacious notwithstanding she was a primipara. He ruptured the membranes, turned and delivered the child without any trouble. One evidence of her having had a convulsion was that in turning there was marked twitching of the muscles of the face, and he fully expected to see violent convulsions.

As soon as he could he tested the urine and found it loaded with albumen.

Although, as remarked before, he had no assurance, except the word of the midwife, that a convulsion had taken place, still, the hydræmia, the great pressure and the albuminuria were all favorable for such an occurrence.

In regard to the etiology of the disease, he thought we generally found albumen in the urine, but that a nervous predisposition was the strongest underlying element in its production.

Chloroform inhalations and hypodermic injections of morphia were the remedies to be relied upon. He had known patients to have been kept under the influence of chloroform continuously for twenty-four hours.

He had seen one case where venesection had acted efficiently when every other means had failed. Dr. Mitchell had seen the case with him. They bled the patient as a dernier resort, hardly expecting any good to arise from it, when, to their surprise, she began to rally almost immediately and made a good recovery.

Dr. Gustav Zinke said that his first case of puerperal eclampsia was the third case of confinement he ever attended. The patient, a primipara, at the end of gestation, was in the hands of a midwife. The first convulsion was passed unnoticed, but on the appearance of a second he was called in. About fifteen minutes after his arrival another convulsion

occurred. Dr. Valentine Schneider was called in to assist, but was not satisfied at first that she was suffering from eclampsia until another took place in his presence. She was put under the influence of chloroform by Dr. Schneider, while the speaker applied the forceps and delivered the child. Mother and child are both living to-day.

His second case occurred about three years ago in a pluripara, who, in every one of her previous confinements, was seized with eclampsia post partum. This time she was delivered of a dead child by Dr. Palmer and himself, death of the child being caused by prolapse of the cord. Expecting eclampsia, he requested the husband to call him as soon as anything occurred indicative of its approach. One hour after, he was hastily sent for, and when he arrived at the bedside the patient had just recovered from the first attack. He prepared one grain of morphia for hypodermic use and sat down to await the beginning of the next, which occurred almost as soon as he was ready with the injection. The morphia was introduced immediately above the umbilicus. The spasm ceased almost instantly and never returned. Patient slept well all night. At midnight, respiration ten; pulse and temperature normal; a good recovery was made. Albumen was found in the urine next day but not thereafter.

The third case was one of suspected puerperal eclampsia, the woman being found dead when the physician arrived. He had made a post mortem examination that morning and found no pathological change in any organ of the body except in the brain and a few adhesions in the left pleural cavity. There was some slight congestion of the kidneys, but nothing to point to the patient having had puerperal convulsions, unless we call convulsions puerperal, because occurring at any time during the puerperal state. Examination of the brain revealed tubercular meningitis, and he gave as his opinion to the Coroner that the woman died from convulsions due to tubercular meningitis, but excited by the approach of parturition.

At first, the speaker had some doubts as to whether this patient had convulsions at all, for the mother did not describe the case as one of convulsion, she said: "My daughter awoke as usual, and at about the same time as always in the morning; she requested urgently to be taken to the closet to have a stool, sitting at the edge of the bed in the act of getting ready to go, when she suddenly exclaimed, 'Oh, mother, mother! I must choke!' and fell back upon the bed and expired." The midwife present, however, said she had convulsions.

Dr. Mitchell remarked that authors state that eclampsia occurs most frequently in primiparæ and in multiple pregnancies; also that where the convulsions are at an end the danger is not past, because they favor puerperal inflammation and predispose to post partum hemorrhage. The

cases reported to-night were primiparæ and twin pregnancies, but they were not followed by any of the accidents or sequelæ mentioned.

The prognosis in eclampsia is always serious. The lowest mortality given by any observer (Carl Braun) is twenty-six per cent. The earlier the convulsions occur the more grave the prognosis. From and an analysis of eighty cases by Löchlein, where the convulsions supervened prior to or during the first stage of labor, forty per cent. proved fatal. The same observer records fifteen cases in which the first convulsion came on after the accomplishment of the first stage of labor. Of these only one died. The causation of death in fatal cases is carbonic acid poisoning induced by tetanus of the respiratory muscles or nervous exhaustion. In about thirty per cent. of the cases the convulsions cease as soon as the uterus is emptied; in thirty-seven per cent. they are diminished in frequency, and in thirty-three per cent. they continue with unabated severity.

As to the pathology of eclampsia, he thought, like puerperal insanity, it has none. In three post-mortems he had made the meninges of the brain were congested and the venous sinuses filled with blood and marked anæmia of the deeper brain structure, also congestion of the kidneys. He believed the predisposing cause to be the peculiar nervous temperament of the woman, and the exciting cause in the majority of cases renal insufficiency, not necessarily associated with albuminuria.

As to treatment, he thought during the seizure nothing so good as inhalations of chloroform, followed by hypodermic injections of morphia in combination with atropia. He also believed in unloading the alimentary canal as soon as possible. He had seen probably eight or ten cases in all. In two cases venesection was practiced with gratifying results. He was not an advocate of blood-letting save in a few cases. In the case mentioned by Dr. Cleveland venesection was performed as a *dernier resort*. The pulse grew stronger and the patient's general condition improved the moment the blood began to flow. But it was difficult, in the beginning, to induce its flow, so feeble was the heart's action. At the end of eight minutes, notwithstanding the arm was tightly bandaged and the vein well opened, only two ounces of blood was abstracted. After this the flow increased and from twenty-eight to thirty ounces was taken.

Dr. Cleveland said that the relief produced in this case by venesection might possibly be explained as follows: He had given morphia very freely, and the woman might really have been poisoned with the drug, the blood saturated with it as it were. The bleeding, he thought, would relieve the system of a certain portion of the drug, and, at the same time, start up a more active circulation of the blood, thereby aiding in its elimination.

In whatever way the loss of blood acted, he never saw such marked

results. The respiration began to improve almost immediately and the patient experienced great relief.

Dr. Palmer said that if any one thing is well understood now, from our present standpoint of the etiology of puerperal eclampsia, it it that there is no certain distinct pathological condition to be recognized in all cases. There is no one definite cause in all cases. The theory of Simpson and Brown, that it is always due to albuminuria, was probably the most satisfactory one, as showing the influence of a predisposing cause. But albuminuria or its associate uremia could not be the factor in all cases, as demonstrated by the fact of its frequent existence without giving rise to eclampsia, by its entire absence in some cases, and by its presence only in a certain proportion of the eclampsic attacks. The only reply that can be made to explain these irregularities is, that uremic poisoning may be present when there is no albuminuria demonstrable. In view of these facts, it is more rational to believe that the blood state is not that of uremic poisoning, but is one of urinemia—the presence of various effete products in the cirulation arising from the condition of pregnancy, viz: a growing fetus in utero, mechanical pressure and the relative insufficiency of kidney elimination.

The condition of the blood in pregnancy, its increased quantity, its state of hyperinosis, and the presence in it of effete elements of increased tissue disintegration and defective excretion, is a predisposing cause of an eclamptic attack. The condition of the nervous system during pregnancy, increased irritability and excitability, must also be recognized as a predisposing cause.

The temperament of some women is such that a small exciting cause provokes a convulsive movement. What is true, and so often clinically witnessed in this regard with young children, is equally true though to a lesser degree with woman. Take, then, certain nervous temperaments—a mobile nervous system, place it under the condition of the blood changes and reflex irritation, more or less incident to every pregnancy, and we have a combination of factors most favorable to the induction of an eclampsic attack.

If we divide all causes into two kinds, predisposing and exciting, and group under the first the inherited and acquired state of the nervous system, and the conditions incident to pregnancy, we have the predisposing causes; while if we group under the second the irritation of labor, the presence of irritating materials in the intestines, undigested food in the stomach, etc., also certain mental, moral and emotional disturbances, we have the direct exciting causes. The mistake has been to search for some certain one cause in all cases.

Dr. Gustav Zinke was inclined to believe that Dr. Cleveland's patient recovered through the use of the morphine, rather than that she was dying from the effects of it. Admitting that some morphia might be drawn

off with the blood, the quantity could not have been sufficient to produce such marked results. In one of the cases he had seen he had injected at once a grain of morphia just as she was attacked with a convulsion, which had the effect of cutting it short almost immediately. Excepting a very slow respiration, the woman was in a very good condition next morning.

Dr. Wright, the president, mentioned three cases of puerperal eclampsia where the urine was thoroughly tested and no albumen found, while during the past week he had attended a case of labor where there was edema and 2·5 per cent. of albumen in the urine for six weeks prior to delivery, and yet he had never seen a case of confinement progress more favorably, no untoward symptoms whatever having arisen at the end of ten days.

Dr. Wenning said that the case reported by him was the third one of puerperal eclampsia that he had seen, but the first where the convulsions came on during labor. In the other two they made their first appearance after the completion of parturition. In the first of these, which occured in the practice of another physician, the convulsions set in shortly after delivery, and in the other, his own case, almost a week after delivery. The former died, the latter recovered. In the latter the urine was highly albuminous. He was not aware of the condition of the urine in the former case, as he witnessed it only just before death.

Although the case referred to by Dr. Zinke, which occurred to him on the day of this meeting, presented no tangible proofs of puerperal eclampsia, yet such an occurrence would not have been an impossibility. The fact that the post mortem examination gave only negative results, so that no pathological changes could be found to explain puerperal eclampsia, does not prove that we must exclude the possibility of this disease, because these changes might be so minute as to elude microscopical observation. Besides, if the convulsions were due to reflex action, no lesions whatever would probably have been found. The kidneys and urine are not necessarily involved in this disease, and it is a question if cause and effect are not often confounded, as albuminuria may be the effect and not the cause of the eclampsia. The lesion may not be in the kidneys at all, but in the brain; and as irritation of the floor of the fourth ventricle causes glycosuria, so some irritation of the brain may cause albuminuria. One author mentions a case where at the autopsy the convulsions were found to have been caused by a tumor in the brain. Cohen of Hamburg goes so far as to divide eclampsia into a cerebral and a uterine variety, and gives a diagnostic table of each.

The two most prominent theories are the Traube-Rosenstein theory of hydremia, and Frerichs' theory of uremia. According to the former the watery condition of the blood as ordinarily found in the pregnant state is one of the chief promoters of this disease. The increased arterial tension caused by a hypertrophy of the left ventricle, favors an effusion into the

cerebral tissues, which by pressure on the vessels causes anemia of this organ. Frerichs thinks the decomposition of urea in the blood into carbonate of of ammonia is the cause of these convulsions. Spiegelberg is the chief advocate of this theory, but regards the retention in the blood of all the excretions of the kidneys as the cause of eclampsia, rather than the decomposition of urea into carbonate of ammonia. Most of the modern authors sum up the treatment of eclampsia in the administration of chloroform or morphia or both. The speaker from his experience preferred the combined use of morphia and chloroform for various reasons. In the first place, there is not the danger of fatal narcotism in the judicious combination of these agents as there would be from a prolonged inhalation of chloroform, or from large and frequent doses of morphia. Secondly, the action of chloroform is much more prompt than that of morphia, and when the anesthetic effect of the former has been obtained a full hypodermic injection of the latter will keep up its action longer and prevent a renewed attack. Finally the immediate soothing action of chloroform has a powerful moral influence on the attendants and bystanders who are all in confusion when a convulsion comes on.

The speaker regarded blood-letting as a therapeutic agent for which we ought to make a rigorous selection of cases. It is true that it has been recommended by good authorities, and in a plethoric condition there can be no reason against it, but when the blood is already too watery the patient is not in a condition to lose much blood. It is true that a portion of the watery element, the cause of the eclampsia according to one theory, and some of the retained products of tissue metamorphosis escape with the blood; hence this treatment might be proper according to both theories as to the cause of the disease. But the speaker believed with Shroeder that we lose a disproportiately large amount of the healthy blood, and though blood-letting may have an immediate palliative effect, the ultimate result will be worse than before, because the poisonous or watery elements will re-accumulate, while the healthy portion is diminished.

Dr. Trush remarked that he had reported his case mainly to show how readily some cases were controlled by hypodermic injections of morphia and atropia, and he did not believe that any known remedy could have acted more promptly or beneficially. Regarding the case as one of the urinemic variety he administered eliminatives as speedily as possible, and gave the bromide of potassium for its known effect in regulating the cerebral circulation. His observations had led him to believe that, although probably a majority of the cases of so-called puerperal eclampsia were of uremic or urinemic origin, a goodly proportion of these cases had no such basis, but were simply of a reflex character, and comparable to the eclampsia of children induced by irritating ingesta, by worms, etc. In this class of cases frequently there is no derangement of the functions of the kidneys or other great viscera prior to the first seizure. Given by nature

a vulnerable nervous system, the normal irritability of which has been increased by the pregnant state, and he did not see any good reason why in such females the profoundly irritating effects of labor pains should not as readily provoke an attack of convulsions as the indigestible food does in the susceptible child.

Dr. Trush also reported a case involving the following question:

IS PILOCARPUS POSSESSED OF OXYTOCIC PROPERTIES?

The query, it is well known, has been in the past repeatedly both affirmed and denied; at the present time the weight of authority is undoubtedly upon the negative side of the question and few physicians probably would hesitate to administer the drug to pregnant females if pointed indications for its use were present. Under the circumstances a case bearing upon this point may be of sufficient interest to justify reporting: Mrs. R., American, pleuripara, sent for me because of an incessant cough, great difficulty in breathing, severe and constant pain at the back and top of the head and swelling up of the entire body. She had not seen her menses for six months and hence would have thought herself pregnant had she experienced any of the usual sensations of this state, but she had not and therefore was at a loss to know how to account for the suppression of her monthly flow. Notwithstanding this absence of subjective symptoms, however, a sufficiency of objective symptoms were discovered on examination to put the existence of pregnancy beyond question; but its duration was a matter of doubt, for the abdominal cavity contained, in addition to the solid tumor, which I conceived to be the pregnant uterus, also a very large quantity of fluid; the patient, besides, had extensive anasarca and a degree of pulmonary œdema, such as to render the recumbent posture utterly impossible. The urine was slightly albuminous, but the quantity passed in the twenty-four hours was abnormally small. It should be remarked here that some six years ago I had attended this patient through one of her pregnancies and the respective confinement and at that time observed similar dropsical symptoms, only much more moderate in degree. I learned, further, that a certain degree of "swelling-up", to use the patient's expression, was a constant phenomenon with her in all her pregnancies—never, however, had this condition been so distressing and threatening as now. A variety of remedies, looking to the removal of the dropsical effusion, were now employed and perseveringly administered for the space of fully two weeks, but all in vain; the anasarca and ascites, the dyspnœa and other distressing symptoms remained pretty much as I had found them. In sheer desperation, therefore, I finally prescribed the fluid extract of pilocarpus, directing the patient to take a small teaspoonful (about half a fluid drachm) every hour, until copious sweating should ensue. At my next visit the patient expressed herself as feeling decidedly better; she had taken four doses of the drops and had then fallen into a dripping

perspiration, which gave her marked relief. Of all the medicines I had given her this was the only one that had done any good; she desired to take more of it. As I entertained no fears of any pernicious action of the drug upon the pregnant uterus, the patient's wishes were gratified, the more because everything else employed, as above remarked, had failed to afford relief. Patient now took regularly morning and evening her three or four doses—usually four doses were required—of the fluid extract of pilocarpus and had her sweat, and there was no mistaking its salutary effects in so far as the dropsical effusion was concerned; it disappeared quite rapidly. But, after having taken the drug for about a week, labor pains set in one night and next morning the patient was delivered of a dead fetus, corresponding in development with perhaps a twenty-four weeks' gestation. The fetus had evidently been dead before the labor commenced, as the epidermis was somewhat macerated and exfoliated in places. The placenta showed marked signs of fatty degeneration. Very naturally the query presents itself, "Did the pilocarpus excite, or at least precipitate the abortion?"

DISCUSSION.

Dr. Palmer said that it was far from certain whether pilocarpus had any special effect in inducing uterine contractions. It was difficult to prove it, if any such there was, as the drug was generally administered to pregnant women when the uterus was acting, or liable to act, from other causes. Possibly it, like other agents, might increase uterine action already inaugurated. Ergot and quinine will act in this way, neither being agents that could be depended upon to originally provoke pains.

One thing, in reference to pilocarpus or pilocarpine, is that it is a very unreliable and unsafe remedy in puerperal eclampsia. Being a most active cardiac sedative, in direct antagonism to belladonna in its physiological effects, it was unsafe to give it in large doses or oft repeated, with a view to act on the skin and facilitate urea elimination, because of its depressing effects. The circulation always becomes sluggish, the heart's action labored, embarassed and weakened, sooner or later, in puerperal eclampsia, hence pilocarpus augments one of the chief difficulties of the situation. It is an agent in this disease capable of doing immensely more harm than good.

Dr. Mitchell said that one of Braun's assistants had experimented with the drug as to whether it increased the contractions of the uterus. One hundred and thirty cases were under observation, and in about fifteen per cent the pains were strengthened. The drug was exhibited only at the inception of labor. It was given in no case where the uterus was not already acting.

Dr. Zinke thought that in those experiments, made where the uterus was already acting, it was hard to tell how much good was effected by the drug, unless they were well marked cases of uterine inertia.

Dr. Cleveland thought that a favorable interpretation might be put on Dr. Trush's case. It would be difficult to say that the pilocarpine caused the death of the child. In a similar case it would be well to use it cautiously.

Dr. Mitchell suggested that owing to the difficult respiration from which the mother suffered, the child might have died of carbonic acid poisoning.

Dr. Wenning thought that the experiments made with pilocarpine were very unsatisfactory. It probably had some effect as an abortifacient.

Dr. Trush, in answer to an inquiry by one of the members, replied that the patient was not predisposed to abortion. She is now the mother of five living children, and so far as he knew, she had never aborted, though as stated in the report, a greater or less degree of anasarca was present in all of her pregnancies, but never so alarming or distressing as at this one. Not only were her sufferings great, but almost at any moment she might be seized with convulsions, the severe and persistent headache in conjunction with the albuminuria pointing strongly in this direction. Under the circumstances, the patient's life being in danger, he would have used any remedy that promised relief, though it might be reputed to be dangerous in the pregnant condition, a property which he had not known to be ascribed to pilocarpine, and he was by no means prepared to say that it was the exciting cause of the abortion in the present instance.

AMERICAN MEDICAL ASSOCIATION.

Thirty-Fifth Annual Meeting held at Washington, May 6, 7, 8 *and* 9, '84.

Section on Obstetrics and Diseases of Women.

Thad. A. Reamy, M.D., Chairman of Section, delivered the following address:

Fellow-members: Custom, as well as law, prescribes as one of the duties of the Chairman of a Section that he present in his annual address a digest of the progress made in that special department during the past year.

Compliance with the letter of this law is now unnecessary, and would, therefore, prove unprofitable. Medical journals, general and special, both home and foreign, conducted with great ability, and exhibiting much energy and zeal in collecting and publishing the latest advances in all departments, are promptly placed by rapid mail facilities upon the table of every reading member of the profession. Moreover, the editorial criticisms of new doctrines, discoveries, methods, or operations are generally from the pens of those who by education and special training have superior abilities for such work. It is, therefore, deemed appropriate, on the present occasion, to refer you for an "Annual Report on Obstetrics and Diseases of Women" to these more fertile and instructive sources.

Craving your indulgence, I beg leave to offer, in lieu of such an address,

NOTES OF TWO HUNDRED AND THIRTY-ONE CASES OF OPERATION FOR LACERATION OF THE CERVIX UTERI.

The date of my first operation for lacerated cervix, "Emmet's Operation," was February 28, 1874. I have now made the operation upon two hundred and thirty-one patients. Not a single death has occurred. In six cases the operation was followed by perimetritis, parametritis, or peritonitis. In but three of these cases, however, were the symptoms sufficiently severe to cause material delay in complete recovery. In one case, included in these three, there were perimetritis, parametritis, and general peritonitis. The patient was confined to her bed for three months. During the attack (acute stage) the peritoneal cavity was aspirated twice. On one occasion, seventeen ounces of serum were removed. This woman finally recovered her health completely. Considerable immobility of the uterus remained for a long time; but now, at the expiration of two years and a half, its mobility is about normal, and menstruation normal and painless; whereas, prior to the operation, she suffered both from menorrhagia and dysmenorrhœa. She was the mother of two children, the youngest being four years old at the date of operation. No abortions had occurred. Sterility continues.

The above case was one of bilateral laceration, extending on each side to the vaginal junction, the torn lips being widely separated and eroded. I attribute the inflammatory complications following the operation in this case to the undue degree to which the uterus was dragged down in order to give unobstructed access. On this point I shall have something further to say before the close of this paper. Complete recovery ensued in the other two cases, but convalescence was slow.

Of these 231 cases, in 170 the laceration was bilateral, in 38 unilateral. Of these latter, 23 were on the left side, and 15 on the right. 16 cases were stellate, in 2 of which there were four distinct lacerations. In 5 cases there was laceration of the posterior lip only; in 2, of the anterior lip only. In 80 cases the laceration was extensive, in 15 of which it extended to the cervico-vaginal junction on both sides. In 22 of the bilateral cases, the laceration extended to the cervico-vaginal junction on one side only. In 3 cases the rent extended to the internal os. In one of these, the vaginal wall was likewise extensively lacerated: the peritoneal cavity had probably been opened, followed by protracted cellulitis. This patient remained a helpless invalid during the three years intervening between the accident and the date of my operation. On one side it required twelve sutures to close the cervical and vaginal rent. Perfect success followed the operation, the patient being restored to robust health within six months.

In 167 cases there was perineal laceration to an extent that left de-

formity, either at the vaginal orifice or more externally. In 15 cases the anal sphincter was damaged. In 7 cases the recto-vaginal septum was opened up. In 26 cases I operated upon the cervix and perineum at the same sitting. In 5 cases of this series, I curetted the uterus with my blunt wire curette at the same sitting; this, of course, being the primary of the three procedures. In none of these five cases did a single untoward symptom arise, the results were perfect.

In 50 cases I operated upon the perineum after recovery from the cervical operation. Each of the above mentioned cases in which the operation involved the recto-vaginal septum is included in this series of fifty subsequent operations. It is perhaps as well to state here that I never hesitate to curette the uterus in a case demanding it, at the time of operating upon the cervix. Nor do I hesitate to use the curette in a case requiring it immediately preceding a perineorrhaphy, pretty extensive clinical experience having convinced me that neither of these operations adds materially to the danger of curetting. Indeed, I am inclined to the opinion that in certain cases in which the conjoined conditions demanding the two operations exist, the depletion of the cervix in trachelorrhaphy presents an element of safety against inflammatory processes which may follow curetting. Three violent cases of traumatic peritonitis have occurred within my personal experience from the use of the curette, unconnected with other operation.

In not a single case of trachelorrhaphy performed by me did secondary hemorrhage occur. In every case in which the hemorrhage was troublesome during the operation it was readily controlled by the stream of hot water which it is my custom to have flow upon the field of the operation during its progress, with but three exceptions, in which it being necessary to denude the torn surfaces deeply, twigs of the circular branch of the uterine artery being cut, compression with torsion forceps was invoked. Contrary to the practice of most operators, I have not, since my fourth operation, employed a tourniquet, ligature, or any similar method to control hemorrhage during the operation. As early as 1875, in my clinical lectures delivered in the amphitheatre of the Good Samaritan Hospital, Cincinnati, and repeated each year since, I emphasized the importance of allowing, in most cases, free bleeding from the denuded surfaces. First, (*a*), because it softens the tissues so as to allow more perfect coaptation of the lips to be united; and (*b*), because of this softening, which is immediate, the tissues are easily penetrated by the needle in carrying the sutures. Second, most important of all, this depletion not only promotes the return of the indurated cervical tissue to its normal condition, but is an immense factor in again starting the process of involution of the uterus, which had been arrested by the laceration and its consequences.

The restoration of form in closing the divided lips of a torn cervix, especially where the deformity is great, is important. The removal of

such pathological conditions as may threaten the development of cancer, and no one can deny that this is in a certain proportion of instances within the scope of the operation, may be even more important; but the influence of trachelorrhaphy properly done, upon subinvolution, cannot be over-estimated. Thorough denudation, cutting out all cicatricial tissue, and allowing free depletion, embrace the essential points in the operation so far as its influence upon involution is concerned.

So powerful is the influence of hot water in controlling hemorrhage from small vessels, when it can be poured directly upon the bleeding surface, that I have frequently found it expedient to withhold this agent for a short time after the denudation is completed before introducing the sutures, in order that sufficient bleeding may occur to accomplish the ends above indicated.

The character of the labor which had resulted in laceration, could not be determined with any degree of certainty, except in comparatively few instances, since information upon this point could be obtained only from the patients themselves. In forty cases, delivery was accomplished by the forceps; in two by craniotomy; in two by turning. Two of the cases in which rupture involved the recto-vaginal septum, were forceps deliveries. It is my belief that early rupture of the membranes, and attempts at forcible dilatation of the cervix by the finger or fingers of the accoucheur or midwife, and the improper use of ergot, are far more fruitful sources of laceration of the cervix than the obstetric forceps.

In the city of Cincinnati seventy per centum of all deliveries are attended by midwives, who, with very few exceptions, are ignorant and unskillful. The sins above enumerated lie closely at their doors. But it can not be denied that these sins of practice are sometimes perpetrated by well educated physicians. Unquestionably, many cases of laceration occur unavoidably, no matter what skill and care may characterize the accoucheur's services. It should be the duty, therefore, of the gynecologist, in all cases in which the patient is referred, or otherwise comes into his hands for operation, to protect the physician who may have been present at the confinement against censure which may be unjust. All the more because the laity, when informed that a laceration of either the cervix or perineum has occurred, at once assume a want of skill or care in the obstetric service. The emphatic declaration of the unavoidableness of these accidents should by the gynecologist be voluntary. So great is the danger that professional reputation may unjustly suffer from this source of censure that in an editorial in a recent issue of one of the ablest medical journals of the country, this was used as an argument against the adoption of Emmet's operation, except in extreme cases.

Mr. Jonathan Hutchinson points out that in many cases the first stage of cancer is that of inflammation; that "all inflammations are infective, and inflammatory processes may pass by almost imperceptible gradations

into malignancy." The acceptance and appreciation of the above facts in many cases would lead to more vigorous treatment of localized inflammations, more especially when they are situated in structures known from clinical experience to be specially prone to cancer, as the uterine cervix, the mammæ, etc. These considerations alone, even if they were not supported by others, urge upon our attention with great force the importance of Emmet's operation. It is the concurrent testimony of almost every distinguished American gynecologist who has expressed himself on this subject, together with many abroad, including Briesky and Schroeder, that the fretting of exposed tissue consequent upon ununited laceration of the cervix is a prolific source of danger in developing cancer.

Emmet, Thomas, Goodell, Mundé and others have cited cases verifying this danger. In my own practice quite a number of cases of cancer of the cervix have been observed in which the neoplasm developed either in the cicatricial tissue resulting from laceration, or in the apex of the cleft. In my opinion, the influence of the accident under discussion in producing cancer has never been fully comprehended by any one. Emmet, the distinguished author of the operation now under consideration, at first spoke out unequivocally; now, however, he alleges that he does not make tracheleorrhaphy once where he formerly did it ten times; and it is easy to read between the lines of what he has recently written, that he does not now believe the evils arising from laceration not operated on nearly so universal as he formerly believed them to be. He seems greatly to deplore the extent to which the operation is being done, and, as I think, without just cause. In further considering the relations between this injury and Emmet's operation to cancer, it may not be amiss to call attention to the fact, so thoroughly recognized by clinicians, that cancer of the cervix is almost exclusively found in women who have given birth to one or more children, or have been the subjects of abortion. So far as the cervix is concerned, cancer is a disease of child-bearing women, not of virgins.

In more than three hundred cases of cancer of the cervix of which I have notes, but one occurred in a virgin, and but ten in married women in whose cases I could obtain no evidence of abortion or child-bearing. Can any one deny that such facts point strongly to the local origin of cancer, in these cases at least? And can it be doubted that injuries inflicted upon the cervix during partutrition have a direct or remote connection with this origin? Would it not be wise to repair these injuries when they are appreciable by whatever method it may be done most speedily and certainly? It is claimed that Emmet's operation should be limited to cases in which ectropion has occurred, or in which a cicatricial plug imprisons or presses upon branches of sentient nerves, causing painful reflex symptoms. I have heard it repeatedly stated, that no matter how extensive the laceration, the operation is not warranted unless these

symptoms are present. These are, in my judgment, errors. Any laceration which has healed without its surfaces being in contact must have healed without complete union, although its extent may have been much lessened by granulation. But in all such cases there is more or less cicatricial tissue in the field of repair. This does not apply to the many cases in which anterior and posterior laceration occurs, and the parts not being separated, complete union occurs without the aid of the surgeon.

Cicatricial tissue in such a locality, even should it not produce reflex symptoms, should be removed thoroughly, and the parts closed, so as to obtain union by first intention, in which cicatricial tissue is never found. If the rent be small, then the operation is small, especially if it be done before inflammation of the cervix has occurred as a result. The denudation need not be extensive or deep. In many cases an anæsthetic need not be administered, as the parts are not very sensitive. The uterus need not be drawn down, so there can be but little danger of cellulitis or peritonitis resulting. Why not do the operation in these slighter cases then, as the simplest and safest method of cure, and thus avoid results which might arise in the future, and prove more serious?

It is impossible for me to give exact data as to the influence of this operation on sterility, as many of these cases soon after recovery passed out of my knowledge. And as the last fifty cases were operated upon within the last thirteen months, sufficient time has not elapsed to test the question. I know, however, of fifteen cases in which conception occurred and delivery took place at term. I have no doubt that as many more have proven fruitful. Of these I attended in labor six, one of these within the past month. In no case did relaceration occur, labor being normal except in two cases. In these dilation of the cervix was slow, but finally complete; in neither was it protracted. I have learned from medical gentlemen who attended several of my other patients that labor was normal.

I believe that the operation, properly done, favors fertility, and often cures sterility. In but two of my cases did union fail. In one of these I foolishly used catgut ligature. In the other failure it was due to the sutures not being sufficiently tightened. In each case subsequent operation was successful.

I may have made the operation in cases not demanding it, but, from my point of view, I do not think so. In eight or ten cases reflex nervous symptoms which I hoped to banish by the operation remained, but in most cases the good effects were obvious; in some cases the cures were almost marvelous. My method of operating, after much thought and some experience, I think worthy of consideration, as it must, I believe, have some advantages over methods generally adopted.

1. I use nothing but the single volsella to draw the uterus down, with which I seize but one lip, the one to be denuded first, at a time.

2. I draw the uterus down as little as possible. This caution should be the more scrupulously observed if any cellulitis remains about the base of the broad ligament or elsewhere.

3. I outline the denudation with a sharp knife, and then cut the tissue included in the line with a sharp scissors. This prevents the rolling of tissue at the borders.

4. Allow free bleeding or not as the condition of the tissue of the cervix, and the involution or subinvolution of the uterus may require.

5. Use a nearly half-circle needle, with a very sharp point, armed with Chinese silk. A needle thus shaped can be drawn through the second lip and withdrawn very much more easily than a straight needle or one curved only near the point. This advantage is all the more apparent when the uterus is not drawn down, as then the vaginal wall makes the withdrawal of the usual shaped needle difficult. I employ a plain needle holder, without any catch or slide, but strong. Silk is preferable to wire, because it can be tied much more quickly, and the tension more easily adjusted; then there are no ends to jag the vaginal walls. Another great advantage of the silk over the wire is in the fact that the sutures may be left in from fifteen to thirty days without danger of cutting out; quite an important matter in a case in which trachelorrhaphy and perineorrhaphy are done at the same sitting. The perineum may heal perfectly and be strong before removing cervical sutures. My custom is to allow the ends of the sutures to remain sufficiently long to reach nearly to the vaginal opening. This facilitates their removal.

6. Wash out the cervical canal at the close of the operation with a recurrent flow syringe, to remove any blood that may have found its way there during closure of the sutures. Have the nurse wash out the vagina with warm, carbolized water within an hour after the operation is completed. The vagina is not syringed again until the sixth day, and then daily until the patient is dismissed. Cleanliness is the only antisepsis employed.

Authorities have been but little quoted, as it is the purpose of this paper to give simply notes of my own cases.

Dr. R. S. Sutton of Pennsylvania presented a paper on

DESPERATE SURGERY AMONG WOMEN: THE PROPER FIELD FOR IT: WHO SHOULD AND WHO SHOULD NOT ATTEMPT IT.

Desperate surgery, he said, means operations endangering life, and in women it is chiefly intra-abdominal. Its dangers are not to be denied, as is shown by American statistics. The proper place for these operations is not in the hospital with its pus-soaked walls, or the modern dwelling with its defective sewage, or roadside cottage with its health-bringing air; there cannot be found the indispensable nurse, and the surgeon may be a league away. These conditions render such a locality unavailable.

The material elements of safety are: Large airy apartments, no zymotic

germs, sun and air space, perfect sewage, quiet city neighborhood, a conscientious nurse, but necessarily a trained one, and the surgeon near his patient. All of these conditions are secured in a private hospital, and with them we can equal the success of Keith and Tate, by whom they are practiced. Statistics show that the best results are obtained in a private hospital.

The general practitioner who is exposed to the poisons of scarlatina, erysipelas and diphtheria, is not warrented in assuming the responsibility of these operations, and by destroying life makes himself liable to criminal prosecution. The obstetrician encountering puerperal peritonitis and other zymotic diseases, has no right to imperil a woman's life. The gynecologist may be the messenger of death whilst attending a case of uterine cancer. The clothing of the practitioner from exposure to infective diseases may be the deadly agent. The history of the past and the judgment of the present decide the operator to be a specialist, and exclude him from general practice. Dr. Sutton concluded with the assertion, that for successful abdominal surgery, the absence of all zymotic disease poison, and the presence of perfect cleanliness and good nurses are essential.

Dr. Engelmann of St. Louis then spoke of the difficulty and importance of blending theory and practice. He thought that Dr. Sutton's views are theoretically true. The late Dr Hodgen, an acknowledged able surgeon, lost most of his ovariotomies. He attributed it to the fact that he at the same time practiced general surgery and medicine. He thought that the chief law of success, absolute cleanliness, was necessary; and that it was best carried out in a private hospital. He had seen an influx of sepsis, apparently from the presence of a single gentleman at an operation, conveyed to the patients that had been and were being operated on in a hospital where the most severe abdomidal operations had resulted previously in but a slight or no rise of temperature. Dr. Englemann insisted on the greater value of a "cleansed" than of a trained nurse.

The specialist endangers the success of his operations when he must take the general practitioner as his assistant. If the specialist can achieve absolute cleanliness he must do it. Even in the English hospitals there remains much to be improved. The private hospital of Dr. Martin is not a model one, and he thought his success had been entirely due to skill and cleanliness. Dr. Martin's new hospital is to have a room for major and one for minor operations, and will be so constructed as to be easily flooded with a proper disinfectant.

Dr. Dunlap referred to his experience of over forty years, and said that the statements contained in the paper were true theoretically. One of the main factors of success had been, however omitted. This is the condition of the patient's mind when removed from her home and left in a hospital. He insisted on the importance of the woman's conviction of recovery after the operation, and did not think the practitioner a walking magazine of

death and destruction. Yet he is careful of cleanliness, and the value of the purifying influence of the air in removing the poison of infectious diseases that may have penetrated the clothing. During 1881–2 almost every one of his ovariotomies died. He lost three cases in succession. Since March, 1883, he has operated twenty-two times with but two deaths. One of these was in a woman of seventy years; the other sixty-four and broken down. He is particular to clean the wound thoroughly, and treat his implements and hands in the same manner. He favors the semi-reclining posture for the patient, which is of great importance for drainage. He does not favor the use of carbolic acid in the abdominal cavity, because it prevents the natural absorption of poured out fluids. At the same time it often interferes with healthy kidney action.

In answer to a question as to the cause of the severe mortality mentioned, he said he thought it due to atmospheric influences passing over areas of country. His other operations in general surgery had also been unfavorable at that time.

NEW YORK PATHOLOGICAL SOCIETY.

Meeting of May 28, 1884.

The President, Dr. George F. Shrady, in the chair.

Salpingo-oöphorectomy.

Dr. Mary Putnam-Jacobi presented the ovaries and oviducts that had been removed by Dr. Elizabeth M. Cushier from an unmarried lady, now thirty-five years old, who had suffered severely with dysmenorrhagia since the age of twenty, although no particular attention had been paid to it until about a year before she consulted Dr. Jacobi, who had found the uterus sharply retroflexed, its cavity somewhat enlarged, and the endometrium exquisitely tender and hyperæmic. The right ovary was prolapsed. On the left side the ovary could not be felt, but there was a soft mass, unlike the exudate of cellulitis, and very sensitive. Dragging the cervix toward the right side always caused very sharp pain in the left side of the pelvis. At times the left ovary could be felt behind the cervix. Besides dysmenorrhœa, there was pain for about a week before each menstrual flow, increasing in intensity until the flow was established. Sometimes, too, there was very sharp pain for a few days after the flow, like a violent neuralgia, and in the intervals there was also constant pain, although less severe, in the left ilio-inguinal region, which frequently extended down the limb.

It was difficult to keep the uterus in position, although the fundus was not adherent, but because of shortening of the utero-vesical folds, which drew the cervix well up under the pubes. This was partly overcome by stretching, and for several weeks the uterus being kept perfectly in place, the symptoms of perimetric inflammation disappeared, and yet the symp-

toms largely remained as before. For four months the patient was kept in bed, and cotton packing was introduced, with a view of pushing up the prolapsed ovary and relieving pressure upon the vessels. After this treatment, together with massage, she was much improved, and for five or six months had no pain during menstruation. Then the pain began to return, and reached a degree demanding the operation. About once in six months while under observation she was seized with a colic of very great intensity like that of nephritic or biliary colic, which continued for about two hours, and after this there escaped from the uterus a small mass of cheese-like matter. This was supposed to be inpissated mucus which had collected in the uterine end of the Fallopian tube. The operation for the removal of the ovaries and tube was performed five days ago, under the use of the bichloride solution. The temperature since the operation had not risen above 101 F., and the patient was now considered out of danger. The operation was done eight days after the menstrual period, and pains had been taken to count the number of Graafian follicles. The extraordinary conclusion had lately been drawn, from the frequency with which an unusual number of mature follicles have been found in ovaries removed by Battey's operation, that there was no special relation as to time between menstruation and the ripening of a Graafian follicle. The cases being those of dysmenorrhœa and menorrhagia, we might suppose that there would be an abnormal development of Graafian follicles. The specimens presented seemed to support this view. The left ovary was turned over, and on its dependent surface was a cyst with which the finger had evidently come in contact and caused acute pain during examinations. The other ovary was in a somewhat similar condition, but the cyst was not quite so large. Dr. Jacobi believed that physicians commonly had an indefinite idea as to the manner in which the ovaries became prolapsed, she thought the condition could only take place by the organ turning over on itself. The uterine extremity of the tubes contained what appeared to be inspissated mucus, a point of interest with relation to the periodic attacks of greatest pain and the discharge of cheese-like masses.

Chronic Peritonitis.

Dr. F. Ferguson presented specimens showing general chronic peritonitis, with extensive and very firm adhesions. He showed also a specimen illustrating injury of the vermiform appendix, and one of large tuberculous ulcers of the large intestine. A short time ago he had seen the statement that ulceration of the large intestine in connection with tuberculosis was very rare.

Dr. W. M. Carpenter said, with regard to the specimen of chronic peritonitis, that he was reminded of a monograph by Vierordt entitled, "Chronic Exudative Peritonitis," in which the author gave the history of several cases, in some of which the patients recovered and lived several

years, and others finally died of an affection directly or indirectly dependent upon the chronic exudative peritonitis. The appearances described were very much like those presented by the intestines shown by Dr. Ferguson—general agglutination of all the coils of intestine with each other, more or less thickening, but not necessarily any adhesions to the abdominal wall. Ascites was prominent at some period in the history. While reading the monograph he was reminded of two or three cases which he had seen, and in which there had occurred typhoid fever, followed by symptoms of subacute peritonitis. There was marked ascites. After a time these symptome subsided under treatment, and two of the patients ultimately recovered and lived a number of years. The condition was not traceable to the ordinary causes of peritonitis, nor was there any history of tuberculosis. One of the patients lived ten or twelve years after being under his care for this condition. Another man, somewhat advanced in years, lived for four or five years, and ultimately died of cancer which manifested itself upon the lip. He had not seen this group of cases well described before reading the monograph in question, and he believed the case related by Dr. Ferguson belonged to that class. Vierordt also spoke of ulceration of the intestines as one of the causes of chronic exudative peritonitis, a condition already mentioned by Dr. Ferguson as present in his specimen.—*N. Y. Medical Journal.*

NEW YORK OBSTETRICAL SOCIETY.

Stated Meeting, Dec., 18, 1883.

The President, W. M. Polk, M.D., in the Chair.

Large Intra-Uterine Myoma Removed by Laparotomy.

Dr. J. B. Hunter related the following case: A woman thirty-four years of age, came to him with an abdominal tumor which her physician had pronounced ovarian. It had first been noticed eight months before, and had grown rapidly, having reached about the size of a child's head. It seemed too hard for an ovarian tumor and too soft for a fibroid. The patient, who was unmarried, had always had scanty menses until since the appearance of the tumor, when the flow increased in quantity at the regular periods, and there was some flow during the intervals. Several of the surgeons of the Woman's Hospital examined her, and opinions were divided between a fibro-cyst, an extra-uterine fibroid, and an ovarian tumor. Laparotomy was performed on Saturday, December 15th, and, after a free incision had been made, a large tumor, believed to be a fibroid, was encountered. Several turns of an elastic ligature were thrown around the neck of the entire mass, and an incision was made, when it was found that the mass was composed of the uterus greatly enlarged by the presence of a tumor within. The tumor was enucleated and withdrawn through an incision made into the uterus. A clamp was

then put well down on the uterus, which was cut away and the abdominal wound closed around the pedicle. The patient had since done well. The tumor had not yet been examined by the pathologist. It contained a considerable amount of bloody fluid in cavities, but not a sufficient amount to give distinct fluctuation. The elastic ligature controlled hemorrhage perfectly. Before the operation the probe had been passed into the uterus a distance of four inches, but could not be swept around.

Dr. G. T. Harrison thought there could be no question but that the proper method of removing such a tumor was by laparotomy; the principal question which could arise was with regard to the method of treating the stump.

Dr. H. T. Hanks asked whether, had the exact nature and condition of the tumor been recognized, it would have been worth while to try treatment by ergot.

Dr. H. J. Garrigues did not think that ergot would cause a tumor of such large size to disappear.

A Trachelorrhaphy Needle.

Dr. Hanks presented a needle for repairing the cervix. It possessed the advantage over that in ordinory use of having the concave side rounded and the convex angular, rendering it stronger and more suitable for introduction through cicatrized tissue. The smallest portion of the shaft was at the eye, thus admitting of easy passage of the needle when once the point had been passed and seized with the needle holder.

Dr. Hunter and *Dr. Bache McE. Emmet* had used a needle answering to the description given by Dr. Hanks with advantage; it was probably the same needle.

Cervical Myoma Complicating Pregnancy.

Dr. Harrison had been called to see a woman, thirty-four years of age, who had been married eleven months. During the first five or six months of menstrual life the flow had been regular; it then became irregular, and during the last few years she had suffered from lumbar pelvic pain and difficulty in urination. The pain grew in intensity. She was under the impression that she was pregnant, as during the past two months menstruation had been absent. On examination, an abortion was found to be in progress, and a large mass was felt in the vagina, the os uteri lying behind. The os was crescentic and distorted to the left. The ovum was expressed. After two months the tumor was removed by means of the scissors and the vulsella. Considerable hæmorrhage took place. Had pregnancy gone to full term, it was probable a good deal of difficulty would have been experienced in expelling the fœtus.

Subperitoneal Myoma Removed by Laparotomy.

Dr. Harrison also related this case, which was specially of interest from a diagnostic point of view. The patient was first seen by him eighteen months ago, at which time he could discover no neoplasm. In June last,

however, he found a large mass filling Douglas's cul-de-sac, encroaching upon the rectum, and pushing the uterus forward against the pubes. It simulated an hæmatocele, but the history did not correspond; the patient had only suffered a short time from obscure pain. Afterward she was unable to pass water, and it was necessary to use the catheter. The tumor increased in size rather than diminished. He then diagnosticated ovarian tumor, and, as it was rapidly increasing in size, advised an early operation. Dr. Thomas coincided in the diagnosis and the necessity for an operation. At the operation the tumor was found to be a myoma, springing from the posterior face of the fundus uteri, and completely occupying the posterior cul-de-sac. Great difficulty was experienced in extracting the tumor from its wedged position in the pelvic cavity, although it had no adhesions. The abdominal wound had to be reopened the next day in order better to secure the pedicle. The patient died of septicæmia and peritonitis.

Dr. Bache McE. Emmet referred to a case similar to the first one related by Dr. Harrison, in which he refused to remove the tumor, which was of large size and situated in front of the cervix, at the utero-vesical junction on the anterior lip of the cervix, through fear of leaving a large cavity and of subjecting the patient to the risk of septicæmia. The late Dr. Peaslee also refuse to operate in the case.

Dr. Hanks said that he once removed a fibroid tumor from the posterior wall of the cervix, of about the size of the one presented by Dr. Harrison, and the pain and distress referred to it before its removal were very marked in that instance, being greater than in cases of tumor situated in the walls of the body of the uterus.

The President referred to a case similar to the second one related by Dr. Harrison, which illustrated the impossibility of lifting the tumor out of the pelvis. Before he got ready to remove the tumor the patient died of dysentery, which was apparently due to pressure of the growth upon the rectum. At the autopsy the adhesions were found to be so extensive that any forcible attempt at reduction would necessarily have resulted in tearing out nearly the whole pelvic viscera.

Uterine Fibroid; Inversion of the Uterus; Difficulty of Diagnosis.

Dr. Roberts Watts related the case of a woman who entered the Roosevelt Hospital with the history that for several months she had been losing a good deal of blood at irregular intervals, and that hæmorrhage had been quite profuse. On introducing the finger into the vagina, a tumor resembling a mushroom was encounteerd, the lower portion being rounded and the upper portion presenting a distinct shoulder. After the patient's condition had been improved, ether was administered, and a thorough examination was made *per rectum* and *per vaginam*, when it was easily de-

termined that the uterus was inverted and a tumor was attached to the inner surfaces of the fundus. After apparently enucleating the tumor, reduction was attempted, but unsuccessfully. It was then found that only the shell covering the tumor had been removed. The entire growth was now easily enucleated and the uterus reduced without difficulty.

Dr. Harrison spoke of the difficulty of diagnosis in these cases, and of limiting the operation to the growth itself. The late Professor Spiegelberg found, after supposed ablation of the tumor in a certain case, that he had taken away the fundus of the inverted uterus.

Dr. Clement Cleveland believed it was maintained that this accident could not happen if the spoon-saw was used.

The President related a case which he had seen several years before, in which the cause of inversion—namely, the presence of a submucous fibroid tumor—was not recognized until after death. The patient was rhachitic, and had a deformed pelvis. The vaginal tumor presented the exact appearance of an inverted and slightly enlarged uterus; not the least irregularity could be detected on its surface. This was a point which had been noticed by several physicians who saw the case in consultation. All attempts at replacement failed. The patient died of exhaustion, and at the post mortem the submucous fibroid was recognized. He believed that the only way in which the tumor could have been recognized during life would have been by microscopical examination, but even this might have failed.

Local Treatment of Diphtheria by Bichloride of Mercury.

Dr. Hanks said that he had for two years been employing minute doses of corrosive sublimate internally in the treatment of diphtheria in children, and believed that he had obtained better results thereby than by the use of any other medicine. But about two weeks ago he saw a child in whom the palate and tonsils had been completely covered with the diphtheritic exudation for two days previous. He administered corrosive sublimate, in one-one-hundred-and-sixtieth-grain doses, in a teaspoonful of water, every two hours, together with Hoffmann's anodyne in doses of one third of a drachm. He considered the child convalescent on the seventh day, but was sent for again on the tenth, and found the tonsils again covered with the membranous exudation. He then had the fauces sprayed every half hour by the hand atomizer, using a solution containing two grains of bichloride of mercury, one ounce of glycerin, and seven ounces of rose-water. The membrane entirely disappeared in in the course of twelve hours. In another similar case, except that there had been no relapse, the bichloride spray produced the same result, the former internal treatment having failed. With the disappearance of the membrane, the patients went on to convalescence. He believed that the

result was due to the local effect of the agent employed. He was in the habit of using fumigation with sulphur, also the other well-known methods of keeping the air in the sick-room free from the poison.

HENRY J. GARRIGUES, M.D.,
B. F. DAWSON, M.D.,
FRANK P. FOSTER, M.D., *ex officio*,
Committee on Publication.

—*New York Medical Journal.*

OBSTETRICAL SOCIETY OF LONDON.

Meeting of Wednesday, April 2, 1884.

H. GERVIS, M.D., F.R.C.P., President, in the Chair.

HERNIA AND PROLAPSE OF THE VAGINA.

Mr. Doran read a paper on the relations of prolapse of the vagina to hernia, illustrated by two pedigrees. The paper described cases of women affected with prolapse of the anterior wall of the vagina, where a very marked family history of hernia existed. The genealogies of the patients were given in a tabular form. The cases all tended to prove the close relation between hernia of the intestine and displacements of the female pelvic viscera.

Dr. Matthews Duncan had long taught that intestinal hernia and procidentia uteri were alternative conditions. The whole of Mr. Doran's excellent paper was a part of the great subject of the retentive power of the abdomen or its pressure-relations.

Dr. Champneys said that, in the work of Landau on movable kidney, various associated conditions were mentioned; hernia was found in seven per cent., descent of the uterus or vagina in thirteen per cent., "retroflexion" in fifteen per cent., and pendulous belly in twenty-five per cent. No explanation is given of the term "retroflexion," but it probably meant the condition known as retroflexion with descent, or rather, descent with retroflexion. It was his habit to inquire of patients suffering from descent of the pelvic organs as to family histories of hernia, prolapsus uteri and prolapsus ani. One such history was the following: A woman, aged 52, had had procidentia since the age of 27, her eldest daughter, aged 30, had had procidentia since the age of 21; all her three sons had prolapsus ani as children.

Dr. Horrocks said allowance must be made for the fact that in the same family it often happened that circumstances obliged all the members to do hard work.

Mr. Doran, in reply, said that the history of rupture was often difficult to obtain, as the condition was naturally concealed, especially between the different sexes, and also between those of very different ages. In some cases the bladder was not displaced in descent of the vagina and uterus. He had recently seen a case of apparent cystocele in which no

part of the bladder was prolapsed. The distinction between prolapse of the generative organs with and without cystocele was an interesting question to solve in relation to hernia.

ELECTRICITY IN PARTURITION.

Dr. Kilner read a paper on the use of the induced current during parturition. The effects of the current were the relief of pain, prevention of fatigue and *post partum* hemorrhage, equalization of the pulse, increase in frequency and strength of the uterine contractions, and the prevention of vomiting. The pain from stretching of the vulva was, however, not alleviated by it; nor did it to any extent relieve pain in cases of instrumental labor. The author now employs the coil (shown) in nearly all cases. In about three hundred cases, *post partum* hemorrhage only occurred twice. The coil sometimes failed to increase uterine contractions when most needed. After its use for an hour or an hour and a half, it exercised its sedative action, and no longer increased the contractions. In some cases, it produces violent and almost continuous contractions. In one case, a contraction lasted fifteen minutes. No prognosis with regard to these points could be made. It had no effect in diminishing after-pains. It generally prevented or stopped vomiting. Statistics were given, and directions for use.

The President said that an agent which increased uterine action while lessening pain was almost too good to be true; but parturient women would be grateful for such a method.

Dr. Playfair had tried the current, and it had proved a failure—perhaps from want of special skill; but, if special skill were needed, it could not be generally used. Its effects in diminishing pain were slight, and not to be compared with other means at our disposal. A battery was a cumbrous thing to carry about, and was likely to alarm patients. As an oxytocic, he had found it useless. Dr. Kilner compared its action with that of ergot, which should never be used to accelerate delivery. Uterine manual pressure was the best and safest oxytocic.

Dr. Walter had used the current for more than seven years for inertia of the uterus after the expulsion of the placenta, and found it in some cases superior to ordinary means. He had found it useful in *post partum* hemorrhage.

Dr. Horrocks asked for details as to live birth, suspended animation, hemorrhage, and whether premature labor had been induced. In this respect, electricity had always hitherto failed.

Dr. Routh had found the electrical current useful in migraine. In lumbago, a man would walk into his study like an old person, and would leave it as erect as a soldier. He had also dispersed uterine fibroids by its frequent use, and tumors of the breast.

Dr. Murray thought that, if the electric current had such power as had been described, the possibility of rupture of the uterus would have to be

remembered. He had used it for hemorrhage, but considered its value very doubtful.

Dr. Barnes had found faradism capable of initiating as well as intensifying uterine contractions, but he had discontinued its use, partly on account of the pain it produced. Its power of lowering arterial tension might relieve the vomiting of pregnancy and other cognate disorders.

Dr. Kilner replied that, as regarded the lessening of pain, the current was more under control than an anæsthetic, and never caused sickness. He had never seen a case of rupture of the uterus.

Meeting of Wednesday, May 7, 1884.

H. Gervis, M.D., F.R.C.P., President, in the Chair.

On Strong Mental Emotion affecting Women as a Cause of Idiocy in the Offspring.

Dr. Arthur Mitchell read a paper on this subject. He said that this cause was often assigned by the mother, but in most cases without sufficient reason, especially as more probable causes could usually be discovered occurring after birth. In some cases, however, he had convinced himself that this was the true cause, especially if the mental state had been protracted, and if the rapidity of developmental changes in the fetus were considered. Such disturbance might act either as arrest or as misdirection, and probably through the bodily health of the mother. Sudden emotions might, in some cases, have had a similar effect; under such conditions, patients had described violent fetal movements following the shock, and afterwards a cessation of movements for some days. Such movements were probably convulsive, and if so, were quite capable of accounting for mental damage. Mental emotion was known to lead to abortion, sometimes apparently preceded by the death of the fetus. The paper concluded with an account of six cases, drawn from 443 cases of idiocy or imbecility consecutively examined, with allusion to 22 other cases, making 28 cases observed in a total of 1,500. In the 22 cases, the evidence was less satisfactory.

The President gathered that the effect was presumably produced through the general health of the mother, rather than directly on the fetus.

Dr. West remarked that such statistics could not be trustworthy until compared with a similar series in which no such results had followed from the same causes. The latter class would, in his opinion, prove a large majority.

Dr. Fletcher Beach said that, according to statistics collected by him in the Darenth Asylum, fright and other violent mental emotions accounted for about one-tenth of the cases in which histories could be obtained; but, in many of these cases, there was also intemperance, involving worry and anxiety to the mother, ill-usage from the husband, pawning of furni-

ture, and want of food. In a large number of cases, there was a history of insanity, imbecility, epilepsy, or paralysis in the parents.

Dr. Cleveland agreed with Dr. West. He related the history of a family of six, three of whom (each alternate child) were idiots. Both parents were sane; there was a history of insanity on the mother's side, but she had never herself been insane.

Dr. Aveling regretted the absence of histories of insanity and consanguinity from the cases related.

Dr. Matthews Duncan observed that Dr. Mitchell did not claim to have proved his thesis, but only said he had "convinced himself" of the truth of it. He (Dr. Duncan) thought he had made it highly probable. Dr. Mitchell had already shown that the age of the mother, the number of the pregnancy, and other circumstances, influenced the offspring. Ancell had shown that the injurious or favorable influence of the number of the pregnancy extended over the whole life of the children to adult age, influencing the rate of their mortality. Such facts proved the grave effect of slight causes and favored the author's view.

Dr. Heywood Smith pointed out the omission from the paper of the date in utero-gestation at which the perturbing influence occurred. In physical deformity of the offspring, the mental shock to which the mischief was ascribed by the mother happened, in his experience, generally between the third and fourth months.

EXTRA-UTERINE GESTATION: DELIVERY OF A LIVING CHILD PER VAGINAM: REMOVAL OF PLACENTA: RECOVERY.

Dr. Mathieson described this case. Patient was aged 30, mother of five children. In November, 1880, menstruation ceased and abdominal pain began. In December a lump was noticed low down in the left inguinal region. She was first seen by the author in March, 1881, when she had a tumor rising to the level of the naval, filling the left inguinal region and extending two inches to the right of the middle line. The uterus could not be mapped out. The sound passed three and a half inches, slightly to the right side, and in front of the tumor. There were occasional pain in the tumor, tenderness, and a feeling "like jelly moving," which made her feel sick, painful micturition, and irregularity of bowels. The tumor continued to enlarge, fetal movements to grow stronger, and the pain became more severe. On April 12th she had an attack of pain and nausea, with pulse 146, temperature 103·6°, cold extremities, and cold sweat, relieved by morphia. Another similar attack occurred April 23, another May 2, and another May 18. On June 2 a somewhat similar attack was accompanied by pretty regular labor-like pains, independent of fetal movements, and accompanied by a red discharge. The tumor continued to grow, and its most rapidly growing part was always the most painful. On June 13 occurred another attack like the last, but the pains were more bearing down, the during them no bulging could be felt through the va-

gina. On June 28 she had a very severe attack commencing during micturition, followed by rapidly recurring attacks of syncope. The roof of the vagina was filled with a doughy mass, solid on deeper pressure. Vaginal operation was at once decided upon, and performed without chloroform at the patient's request, by cutting with a knife and tearing with the finger nail. The face of the child was found presenting, and was delivered with forceps easily. It was still-born, but soon revived. The placenta was at the posterior and left side of the cavity, its lower border some two inches from the vaginal roof. It was easily peeled off, a sponge soaked in perchloride of iron following it up. There was very little bleeding. The clots were removed from the cavity, its walls were touched with perchloride, and the operation ended. Much exhaustion followed the operation. The child weighed eight pounds and a half, and appeared to be mature. The placenta was three-lobed, but was destroyed before a careful examination could be made. The after-treatment consisted in washing out the cavity antiseptically. The opening healed in three months. Severe pain in the side lasted for nearly two years after the operation. She was seen in August, 1883, in excellent health, had no pain except after great fatigue, had menstruated normally for six months. The child was healthy, the largest, and a great deal the heartiest of the family. The author debated the treatment pursued (1) as to the vaginal operation, and (2) the removal of the placenta.

The President doubted the propriety of the vaginal operation, and the removal of the placenta. Each case had to be judged on its own peculiarities, but generally he was in favor of primary operation, and leaving the placenta.

Dr. Aveling suggested the possibility of the sac being a second uterus.

Dr. Playfair disapproved of vaginal operation, and of the removal of the placenta. The case as related was most extraordinary, especially in regard to the labor-pains.

Dr Champneys remarked that such pains were part of the the ordinary phenomena of such cases. The cyst seemed to go into labor on its own account.

Dr. Bantock thought the case one of tubal pregnancy, the tube giving way on its under surface, and that the fetal sac had grown between the layers of the broad ligament.

Dr. Carter related a case of extra-uterine pregnancy. The fetus died about term, and was removed by abdominal section, though it could have easily been removed by the vagina, abdominal section being indicated by an abscess pointing at the naval. Labour-like pains were frequently observed.

Dr. Edis advocated primary operation as an operation of election, especially in view of the present position of abdominal surgery.

Mr. Griffith thought that the presence of a contractile cyst-wall necessi-

tated the gestation being either interstitial, or in an undeveloped form of double uterus.

Dr. Champneys observed that the uterine platisma, which extended widely over the pelvic organs, was sufficient to account for the contraction, and that these have occured in undoubted cases of extra-uterine pregnancy.

Dr. Godson alluded to a case under Dr. Duncan, in which unsuccessful attempts had been made to kill the fetus by injections of morphia.

CASE OF CYSTIC DEGENERATION OF THE CERVIX UTERI.

The President described this case. The patient, aged 45, had had nine children, the youngest five years old. The menopause had occurred four years previous to her admission, which was indicated by abdominal enlargement due to obesity. The cervix was covered with close-set, tense, glistening vesicles, varying in size from a millet to a hemp-seed. There was no other abnormal appearance, and there were no uterine symptoms whatever, the vaginal examination not being indicated by the abdominal enlargement; on puncture, nothing but air escaped with an audible sound, the punctured vesicle afterwards being indistinguishable, except for slight traces of the punctures.

Dr. Herman referred to the disease of the vagina and cervix described by Winchel as "colpohyperplasia cystica," characterized by cysts containing gas.

Editor's Table.

PUERPERAL MASTITIS.—In a recent number of the *American Practitioner* Prof. Parvin contributes a very excellent article on this subject—excellent, because timely and practical. Amongst the causes of inflammation of the breasts Dr. Parvin names the usual sources—cold and the like—but he specially calls attention to the prevalent *fissure* of the nipple as the *fons et origo* of the trouble. For fissure of the nipple the "French use the word *crevasse*, and it is very expressive, for the great gap which is seen in some cases just at the base of the nipple, a crescent-shaped gap which may go on increasing until the sinuses of the milk ducts are opened, or still more serious destruction of tissue occurs. Now, these raw and abraded surfaces, these lesions of tissue, open doors for the entrance of disease germs, and the lymphatics are there in ample number to transport the germs, not only to the superficial, but to the deep parts of the gland."

The popular notion is that retention of milk is a cause of mammary inflammation. In discussing this question Schroeder says: "Suppurative inflammation of the mammary gland commonly arises through the small chaps of the nipple, and through the small scab formed on it occluding

the excretory ducts of some of the lobes of the gland. The secretion is pent up, the lacteal ducts and gland-vessels are dilated and inflamed, and suppuration begins in their walls." As against this popular view of the retention of milk as a cause of inflammation and abscess we have the facts observed in galactocele, and in inferior animals, as in the mammiferæ whose young are destroyed; for example, those sluts and cats whose puppies and kittens are cast into the nearest stream or pond, or in the cow who strays off and is days without being milked.

Just in this connection comes in the question of drawing the milk in inflamed breasts—a custom which is well known as the usual method in domestic practice. Such practice is usual in the lying-in room, but, as Dr. Parvin thinks, in phlegmonous inflammation, "is evil, and only evil, and that continually."

In the way of prophylaxis—an important trouble which frequently presents is the shape and condition of the nipple—instead of a full rounded nipple we have sometimes a flat or almost cup-shaped condition of nipples, Dr. Parvin suggests to draw out the nipple by means of a bottle, its air exhausted with hot water. And then direct the mother to use traction on the immature nipple frequently every day.

Another important point is made by Prof. Parvin; he holds that the common applications of astringent washes, and stimulant applications, as for example, the various solutions of alcohol with tannin, and the like are objectionable—objectionable because they interfere with the proper action of the sebaceous follicles of the structures concerned. Therefore, he directs a gentle daily washing of the breast, bathing the parts with tincture of myrrh, or arnica; then smearing the nipples with vaseline.

After the confinement is completed, what then: How soon shall we apply the baby to the breast? Dr. Parvin expresses the matter very clearly: too soon is a mistake—too long deferred quite as serious a fault; "Let this application be made eight or ten hours after labor, and repeated once in six hours until the secretion is established, when the interval may be two hours at first in the day and four or five hours in the night.

Shall the infant nurse from the inflamed breast? Dr. Parvin says no, and we are sure that is the safe advice? S.

Remarkable Obstetric Experience.—The following extract from a private letter briefly narrates a remarkable obstetric experience. We hope to again hear from Dr. Brooks:

Dr. J. C. Culbertson: Fort Wayne, Ind., June 3, 1884.

I have practiced medicine forty-eight years and have waited on three thousand four hundred and thirty-eight women in confinement at full term (to say nothing of abortions, miscarriages, etc.), and never lost a woman in confinement or as a consequence of it. I do not allude to this in any spirit of exultation. I suppose it is only *unprecedented good luck*,

but I am still thankful that I can say what no other physician in Ohio or Indiana can say with the same or even one-half of my experience: I have never lost a patient. My experience in these matters has been quite varied and I may at some future time, when I have more leisure, allude to it again. Yours truly, WM. H. BROOKS, M.D.

WHEN IS A FETUS A HUMAN BEING.—A very instructive case is reported in the *Medical and Surgical Reporter*. It is reported from the Criminal Court of Berlin. A barber was sent for in a case of midwifery. It was proven that he used forceps, unnecessarily, and with *fatal results*. In the question of manslaughter which resulted, the Court decided "that a fetus becomes legally a human being the moment labor has begun." S.

THE RECENT DEAD.—The profession will perhaps not be surprised but still will not fail to mourn the loss of two great men in our ranks.

DR. WILLARD PARKER, of New York, died April 25th ult., from paralysis. Born in 1800, he had reached a mature age, and was in many respects a very remarkable man. At one time he was connected with medical teaching in Cincinnati.

DR. SAMUEL D. GROSS, died May 6th ult., was born in 1805. Probably no man was so well known as a great surgeon, either in this country or the world at large. He, too, at one time taught medicine in Cincinnati. Subsequently he was the author of the most complete work on surgery of the day, and received from various universities the highest honors they were able to confer. S.

Abstracts and Selections.

I.—OBSTETRIC.

Extra-Uterine Pregnancy—Extraction of the Fetus by Elytrotomy—Cure.—M. Pinard presented before the Paris Academy of Medicine, an interesting case of successful treatment of extra-uterine fetation, by operation through the vagina.

The woman, æt. 31, had borne two children at term, and in November, 1882, exhibited signs of a third pregnancy, which progressed under symptoms which distinguished its course from the two preceding, namely, sharp abdominal pains, inability to continue her occupation, compulsory recumbent position. At term the customary symptoms of accouchement appeared, but sensibly weakened; after their cessation the breast enlarged as after a confinement. Extra-uterine pregnancy was diagnosed. At the end of two months the abdominal tumor, which had remained passive since the pseudo-accouchement, suddenly increased to double size, found

due to the accumulation of liquid; simultaneously severe pains set in, there was trouble in micturition and defecation, and grave general symptoms appeared.

It was decided to remove the fetus by incision into the cul-de-sac of Douglass, which prominently projected into the vagina. The fetus was extracted without difficulty. As the placenta was closely adherent to the walls of the sac, it was not disturbed, but the cavity every two hours was injected with a solution of the bichloride 1-2000; these injections were continued during eighteen days. The placenta became spontaneously detached and was expelled. There was no symptom of general intoxication by the mercurial; also, all septicemia was averted. One month after operation, the patient had entirely recovered; only an elongated cicatrix could be observed on the posterior wall of the vagina. M. Pinard called attention to the fact that there was but one other similar case on record, which exhibited the same conditions and was also successfully treated.—*St. Louis Courier of Medicine.*

Sulphate of Copper as an Antiseptic in Midwifery.—M. Charpentier ("Gaz. hebdom. de med. et de chir.," March 7, 1884) recently reported to the French *Academie de Medecine* a series of experiments that he had made with sulphate of copper as a preventive of putrefaction, the results of which had convinced him that, in a solution of one part of the salt in one hundred parts of water, the agent was a trustworthy and harmless antiseptic. He had therefore used it as a vaginal and uterine injection at the *clinique d'accouchement*, where there had been no deaths since the 15th of June, whereas for the preceding six months, in the service of the late Professor Depaul, there had been twelve deaths from septicæmia in three hundred and ninety-seven cases of confinement. This happy change M. Charpentier imputes to the use of the sulphate of copper. He urges in favor of this agent that it is perfectly safe, very cheap, easily managed, and an instantaneous disinfectant as well as a powerful antiseptic; also, that its astringent and coagulating properties are such it may perhaps in the future take the place of perchloride of iron as a hæmostatic, over which it has the advantage of not clogging wounds. The solution should be used warm, of the strength of one part to one hundred. In a number of cases of large thrombus of the vulva the use of this antiseptic was followed by recovery without the formation of a drop of pus, and in a case of foul abscess of the urethro-vaginal septum it overcame both the fœtor and the symptoms of putrid infection at once, after carbolic acid had failed.—*N. Y. Med. Jour.*

Cotton Dressing for the "Cord."—S. W. Caldwell recommends to practitioners in the South, cotton lint just as it comes from the gin for a dressing to the umbilical cord of new-born infants. He has used it for

fifteen years, he states, with great satisfaction. Taking a clean bunch and freeing it from the faulty seed or motes he passes it for a moment over a flame, then molds it around the finger, lays the cord in the depression, folds the cotton around it, and either applies the binder or simply wraps a narrow strip of muslin around the cotton covered cord without any binder.

He thinks this a very good substitute for the more expensive prepared "absorbent cotton," which he regards as perfection itself.—*Miss. Valley Medical Monthly.*

II.—GYNECIC.

Tait's Ovariotomies. — (From correspondence of St. Louis *Courier of Medicine.*) —The other day I asked Dr. Savage to what he attributed his and Mr. Tait's success — for they are very similar in their methods, and have much the same results—and he replied: "It can all be summed up in three words, 1st, cleanliness; 2d, dryness, and 3d, dexterity." To which I would add, "carefulness."

The first, "cleanliness," brings up the question of antiseptics, which can be disposed of in a word, neither of them uses them. I may have something to say on this subject in a future letter, but, from what I have already seen, I must say that my confidence in Listerism has been very much shaken. Tait uses nothing but pure water, but Dr. Savage does use a little carbolic acid in the water in which his instruments are placed. The instruments and sponges are, of course, scrupulously cleaned, and plenty of water is used from beginning to end, but that is all the antiseptic that is used. There is no oiled silk or anything of the kind placed over the abdomen, but the parts are sponged thoroughly clean before operating.

There are only four persons who take part in the operation, the operator, his assistant, and two nurses to manage the sponges. The nurses have to redress before coming from the other patients, and in fact everything is done that can possibly be done to insure perfect cleanliness. If there are any visitors present, they are required to sign a certificate to the effect that they have not attended any post mortem examinations or contagious diseases for six days.

Before the peritoneum is opened, the external bleeding is arrested with Koeberle's scissor-shaped artery forceps, which are left on until it is necessary to complete the operation, when, as a general thing, all the bleeding is stopped. Just as soon as the peritoneum is opened, sponges are inserted *ad libitum.* I have seen as many as twenty sponges in the abdominal cavity at one time. Before closing the incision, dry sponges are put in and taken out until they finally come out dry and clean, so that Baker Brown's old rule, "don't sponge the peritoneum," has been replaced with the opposite, "sponge until perfectly dry."

Mr. Tait is renowned for his short incisions. As a rule he seldom makes an incision longer than an inch and a half in simple ovariotomies, or the removal of the appendages. With this small opening, barely large enough to admit his two fingers, he diagnoses the case, and generally completes the operation. From what I have seen, and judging from a discussion that has just taken place in the *Lancet*, I am led to believe that no one ever attempts to perform the operation with as small an opening as Lawson Tait. He is remarkably skillful with his fingers, not only in abdominal section, but in every other operation I have seen him perform.

Carefulness in little things has much to do with success. In every operation there are the same number of instruments, the same number of artery forceps (12), the same number of sponges (either 12 or 20). When the operation is about completed, and the sutures ready to be tied, the nurses have to count the sponges, etc. This, of course, is absolutely necessary, for it is a very easy matter to leave a sponge in. Several times I have seen the operator search the abdominal cavity for some time before a sponge could be found, that was known to be there only from counting them. The anæsthetic used is bichloride of methylin.

His method of treating the pedicle is the intraperitoneal, after ligating with silk. He uses a peculiar double knot for tying the pedicle, which, for want of a better name, I would call the Tait knot. The advantages of this knot are that while the whole is compressed into one surface, it ties the pedicle in two halves, and at the same time these halves are equally well compressed, so that very great constricting force can be employed. To tie with this knot a long-handled needle is threaded with the silk required and pushed through the center of the pedicle. The needle is then withdrawn, and a loop left on the opposite side of the pedicle. Then the loop is drawn over the tumor or ovary, and one of the free ends drawn through it, so that one end is above and the other under the retracted loop. Both ends being seized they are drawn through the pedicle, till complete constriction is made. A simple hitch is then made and tightened, as in an ordinary ligature. The pedicle is then cut about a third of an inch from the ligature.

The intraperitoneal method of disposing of the pedicle was a long while in being adopted, but it has been the means of lessening the mortality at least fifteen per cent. There are times, however, when the clamp must still be used. But in all the operations I have seen, I have only seen the clamp used five times—four by Mr. Tait and once by Dr. Savage — the latter a Porro's operation, and the removal of a six month's child.

During the ten weeks I have been here, Mr. Tait has operated sixty-five times, with only one death. The fatal case was a cancer case, and the operation was a *dernier ressort*, and the woman died in twelve hours. Thus, throwing out this case, which really ought to be thrown out, we

have sixty-four consecutive cases in ten weeks without a death. When we think what was the rate of mortality only a few years ago, when we expected at least twenty out of every hundred to die, we may well rejoice at the results of the present methods.

Solution of Chloride of Sodium in Hemorrhage.—Dr. Betz suggests in his *Memorabilien* (*Wein. Med. Blätter*, March 6), the administration of a solution of chloride of sodium by the mouth in cases of hemorrhage, where transfusion cannot be resorted to. In one case of hemorrhage after abortion he administered half a litre of the solution, containing a teaspoonful of salt, at the rate of three tablespoonfuls every five minutes. A second half litre was afterwards given at longer intervals, and whilst it was being taken the lips and cheeks began to be colored, and the pulse grew stronger. The patient recovered.—*London Med. Record.*

The Action of Salicylate of Sodium on the Uterus.—According to the "Bulletin general de therapeutique," M. Balette has arrived at the following conclusions in regard to the action of salicylate of sodium on the uterus: In ordinary therapeutical doses, it allays the pains of dysmenorrhœa, probably by its sedative action on the central nervous system. It appears to promote the menstrual flow, and, in some cases, to provoke its reappearance. In four instances, given in large doses, it was followed by abortion, but moderate doses seem to have no tendency to act as an abortifacient. No oxytocic effect was ever observed in experiments on animals. Nevertheless, the caution is added that it should never be given during gestation, except on very precise indications, and that then its action should be watched carefully.

Successful Abdominal Surgery.—Dr. Robert Battey, of Rome, Ga., reports to the *Virg. Medical Monthly* eighteen consecutive cases of ovariotomy, and performed by him, all successfully. He employed a modified antiseptic treatment. He insists on having the patient under his immediate charge subsequent to the operation, and concludes as follows: "The friends of a patient are by no means the best nurses for an ovariotomy case. Whilst in England I was assured that no operator who had any character to lose would venture to stake it upon an operation to be done under such disadvantages. They all require their cases to come to them, and put them into the hands of their trained nurses.

Large Calculus in a Woman.—Surgeon Hunter, of the Bombay Army, reports the case of a woman with symptoms of stone in the bladder. The urethra was dilated for a week with metallic dilators and bougies, when the finger could be passed easily into the bladder. Lithotomy forceps were then introduced and the stone seized, but was found to be too bulky for

extraction. The urethra was then incised for half an inch, when a phosphatic calculus, measuring over four inches in circumference and weighing seven hundred and sixty grains, was removed. The patient, two weeks after, well, and with no incontinence.

Ovariotomy on a Child of Eight and a Half Years.—The mother had only noticed the abdominal development during a few days. The tumor was movable and slightly fluctuating. The abdomen was opened, the tumor punctured, and about a quart of a lemon-colored fluid drawn. The left ovary and fallopian tube were implicated. No adhesions. Convalescence was rapid and uncomplicated. Spencer Wells has published one at eight years and another at thirteen years. Pean one at twelve years, the cyst having heen punctured several times. All recovered. (*Loire Medicale.*)

III.—DISEASES OF CHILDREN.

Tracheotomy in a Diphtheria Case.—Operative procedures for diphtheritic and croupy conditions have thus far been unsatisfactory—therefore we give the following interesting case, as reported by Dr. Nathan Mayer, of Hartford, Conn. The points are so full and satisfactory that we reprint the report of the case in full.

The initiatory history of the case runs like this: On December 28th last, Mrs. S—, whose mother I had been attending for an acute bronchitis, called my attention to her little girl Bessie, a well-developed child, aged one year and ten months. The child had been depressed and sleepy for several days, with loss of appetite and considerable fever. The probabilities of worms and difficult dentition were discussed, and as no special organ could be fairly held responsible for the condition, the babe was left alone for the present. On the day after the same state was found, but somewhat more pronounced. A little aconite was recommended. Next day patches appeared in the throat, a clearly margined ulcer on one side, and an extensive but thinner membrane covering the tonsil and the soft palate. At the same time the cervical glands under the angle of the jaw were swollen and painful. Tincture of iron was used in the Jacobi manner, and the throat gently brushed twice a day with a solution of sulpho-carbolate of iron in glycerine. The following day the slough had come away from the one tonsil, leaving a bare granulating surface, and in addition to the membrane on the other side, some irregular patches were perceptible on the pharyngeal wall. The voice was entirely gone, but breathing did not seem much impeded. The steam chamber with lime vapors was added to the treatment, and turpentine applications to the throat. Next day I was summoned early, and in anticipation of the state of the case, took with me chloroform and a small rubber tracheotomy tube. When I arrived the child was in a state of

approaching asphyxia. The eyes dull, the lips blue, the countenance livid, extremities cold, and only an occasional inspiration, which was forced with all the energy of the muscles of the chest, throat and countenance. The father, a lawyer and a gentleman of great decision, said: "Do something to relieve her, even if she doesn't get well. Open her throat." I at once seized the child and carried her into the next room, placed her on the washstand with her head hanging down toward the window, and tore open her clothes. She began some faint struggles, so that I gave her a few whiffs of chloroform and prepared to operate. One moment I paused, thinking she was dead. Then I made quick incision from the base of the larynx almost to the sternum, and spreading the skin with my fingers rapidly endeavored to bare the trachea. I seized this between my left finger and thumb to steady it, and hesitated once more, thinking the child moribund. Then opening the trachea, and indifferent to the rather free hemorrhage from the parts around, I introduced my dilating forceps, and between the branches pushed in the canula. A spray of blood responded, and the whistling respiration, which I assisted by manual pressure on chest and abdomen, was attended by similar spray from the tube for some minutes; and for several hours bloody froth was thrown out occasionally with the expiration, and always with the cough.

The rest is very simple. In a few hours the child seemed to regain regularity and ease of breathing. It lost the livid and blue tinge, coughed frequently, expectorating through the canula, and, though feverish, with high pulse and temperature, yet attained a certain degree of comfort. Alimentation by the rectum was undertaken, but caused vomiting which nearly dislodged the canula, and brought out the only shreds of membrane which were voided that way. If any loosened previously and were coughed up they must have been swallowed, as small children usually dispose of their expectoration. Medicine and brandy were continued by mouth, and swallowed with some difficulty, as well as very small portions of milk.

Immediately after the operation the child was returned to the steam cabinet, and kept there for the next fortnight. In about five days the temperature and pulse subsided; more milk, beef-juice, and a little egg were swallowed, the iron was discarded, and bits of crackers voluntarily taken. The cough proved frequent and troublesome at this time, mucus of a certain thickness and tenacity being presented at the mouth of the tube, and drawn back several times before ejection. Frequent cleanings and withdrawal of the inner canula became necessary. The wound around the mouth of the canula looked well, never exhibiting distinct signs of diphtheritic supervention. On the tenth day the tube was experimentally withdrawn, and the parts joined together with a plaster. The child seemed uneasy and struggled as if it did not get air enough, and when the experiment was continued, began to look a little blue. At

the same time no sound issued from the larynx. So the tube was introduced once more. The parents were directed to make frequent trials by withdrawing the inner tube and stopping the outer, which was fenestrated so as to permit the current of air to pass through the larynx. These experiments gradually accustomed the organ to the performance of its usual functions, evoked moisture, and when two days after the tube was again withdrawn and the opening plastered up, the little patient breathed easily and well. But no sound was as yet audible. Finding the wound well contracted, and the canula difficult of re-introduction, I left it out, and matters went on very smoothly. On the sixteenth day I heard the little one say "papa" and "mamma," and knew that the cure was complete. In the last seven days the appetite had increased, the usual playfulness returned, and one day I found that I could interest the little one deeply by boring a hole in the throat of a toy elephant, and inserting the inner canula. On each succeeding visit I was presented with the elephant to carry out the same operation.

It is unfortunate that the temperature was not measured, on account of the restlessness of the little patient and the urgency of the other symptoms. The pulse ranged at 120, and during the critical days was beyond counting.

The lessons of this case are to me: that, though authors do not commend late operations or those performed on children under two years, yet such may be successful, and when the parents are in accord, should be attempted. In this connection, I may refer to the case of Dr. G. F. Shrady, a successful tracheotomy on a child of eleven months, and also to eight more all under one year, which he cited in his report of that case two years ago (*Medical Record*, vol. xxii., p. 512). These nine are seemingly all that are known to literature at present. The canulas used in these cases must have been smaller than any ordinarily found in the market.—*N. Y. Medical Record.*

Congenital Malaria.—Dr. W. T. Taylor (*New York Medical Journal*, March 15, 1884,) reports the following case, which is of interest. Mrs. A. R. during her second pregnancy was affected with malarial fever, and although she was then residing at the sea-shore was obliged to take occasional doses of quinine to control it. She returned to her city residence at the end of the season, and continued using quinine from time to time until the end of her gestation, which was completed in November, 1883, when her infant was born. Her labor was natural and easy, and she had no unfavorable symptoms. The infant appeared healthy and was of good color, but was smaller and more feeble than her first-born had been. The baby soon drew the breast vigorously, as there was a plentiful supply of milk. About one week later the nurse called Dr. Taylor's attention to the fact that the infant occasionally had attacks characterized by coldness

of the skin, feeble circulation, and prostration, which continued for fifteen or twenty minutes and were followed by a clammy perspiration. The application of heat to the body and giving it a little brandy and water would revive it. The symptoms appeared to have a periodicity occurring every two or three days, and as they were considered malarial quinine and valerianate of iron were given to the mother, which soon caused the symptoms to cease, and the baby became well and fat. The infant also took small doses of the elixir of cinchona for several weeks. Dr. Taylor considered that the disease must have been contracted in utero, for the infant was born in a perfectly healthy locality where it had not been exposed to any external malarial influence. When labor began the quinine was stopped and was not resumed until the condition of the infant required it, when it quickly arrested the symptoms, and the patient is now perfectly well. Dr. R. P. Harris reports a similar case to the above, where the infant was also treated through the mother's milk with quinine.

Gossip.

A New Honor to Prof. Fordyce Barker. — The many personal friends of the distinguished president of the New York Academy of Medicine, Prof. Fordyce Barker, and the profession generally, will join us in congratulating him on the eve of his receiving another high honor from abroad. The Edinburgh University, on the occasion of its tercentenary anniversary, has decided to confer a limitcd number of honorary degrees upon distinguished foreigners. Dr. Barker has been invited to attend the convocation and receive the degree of LL.D. from that university. He accordingly sailed recently.

No honor which this ancient university can confer will be more worthily bestowed or more honestly earned. The profession of this city and country have more reason than one for being proud of the subject of this rare distinction.—*N. Y. Med. Record.*

Modesty. — Dr. John L. Altee relates of Dr. Thomas C. James, Professor of Midwifery in the University of Pennsylvania in 1815, "that he was a very modest and agreeable gentleman, of Quaker origin. He had such a sense of delicacy that he could not bring himself to lecture on the female organs of generation, but entrusted this part of his course to Dr. Horner."

Wonder if he did not number among his maternal relations the Quaker damsel who would never walk in the garden because the potatoes had eyes.

He must also have been related to the young lady who locked her

stateroom door upon hearing the captain of the boat scream, "haul down the sheets." This was the same young lady who refused to go to a party as long as undressed kids were in fashion.

Beef-tea, made red hot with red pepper, is the very best treatment for delirium tremens. A patient to whom I once administered such a dose, made so strong that I would not have dared to taste it myself, afterwards told me that it was the most refreshing and *cooling* drink he had ever taken. A London surgeon to the police told me that he had treated a hundred and fifty cases of delirium tremens with this remedy *alone*, and had not lost one.

Thus does the old expression of being "teaed" lend a new significance to *similia similibus curantur.*

A Thin Janitor. — If you have a student under you who wishes a good and cheap skeleton, have him correspond with Albert Beck, Janitor St. Louis Medical College. We can personally recommend him. — *St. Louis Med. and Surg. Journal.*

"No use to take your medicine," said a patient to a doctor, "for as I never expect to get well, I could not pay you." "Had you intended to pay me?" the doctor asked. "Yes sir." "Well, then I'll change your treatment. It's a hard matter, and somewhat unprofessional, but as you entertained an idea of paying me, you'd better take a little of this harmless powder instead of the dose I had mixed for you."

Quintuplets. — Dr. Reeves, of Wheeling, W. Va., vouches for the following (*Columbus Medical Journal*): A married woman, living at Moundsville, W. Va., gave birth to five children — two boys and three girls. They were perfectly formed, and weighed from four pounds to two ounces. Only one of the number weighed four pounds, the remainder ranged from two ounces up. They were stillborn. The mother, at last reports, was doing well. [How of the father? We hope he is also doing well.]

"You just take a bottle of my medicine," said a quack doctor to a consumptive, "and you'll never cough again."

"Is it as fatal as that?" gasped the consumptive.—*Boston Globe.*

Cabasso warmly thanked the physician who had just cured him.

"Doctor," he said, while seizing his hand, "I shall never forget that I owe you my life."

"You exaggerate," mildly replied the disciple of Æsculapius, "it is exactly correct to say that you owe me for fifteen visits."